QUELLE 104.424.7

MODEL

SERVICE MANUAL

TABLE OF CONTENTS

SECTION 1 SUMMARY
KEY TO ABBREVIATION

A	AC	:Alternating Current
	ACC	:Automatic Color Control
	ACSS	:Automatic Channel Setting System
	ADJ	:Adjust
	A/E	:Audio Erase
	AFC	:Automatic Frequency Control
	AFT	:Automatic Fine Tuning
	AGC	:Automatic Gain Control
	A.H.SW	:Audio Head Switch
	ALC	:Automatic Level Control
	AM	:Amplitude Modulation
	AMP	:Amplifier
	ANT	:Antenna
	APC	:Automatic Phase Control
	ASS'Y	:Assembly
	AUX	:Auxiliary
B	B	:Base
	BGP	:Burst Gate Pulse
	BPF	:Bandpass Filter
	BS	:Bradcasting Satellite
	BW or B/W	:Black and White
C	C	:Capacitor, Chroma, Collector
	CAN	:Cancel
	CAP	:Capstan
	CAP.BRK	:Capstan Brake
	CAP.RVS	:Capstan Revers
	CATV	:Cable Television
	CBA	:Circuit Board Assembly
	CCD	:Charge Coupled Device
	C.CTL	:Chro Contral, Capstan Control
	CFG	:Capstan Frequency Generator
	CHROMA	:Chrominance
	CNR	:Chroma Noise Reduction
	COMB	:Combination Comb Filter
	COMP	:Comparator Composite Compensation
	CONV	:Converter
	C.ROT SW	:Color Rotary Switch
	CS	:Chip Select
	C.SYNC	:Composite Synchronization
	CST	:Cassette
	CTL DIV	:Control Divide
	CUR	:Current
	CYL	:Cylinder
D	D	:Drum, Digital, Diode, Drain
	D.ADJ	:Drum Adjust
	DC	:Direct Current
	D.CTL	:Drum Control
	DEMOD	:Demodulator
	DET	:Detector
	DEV	:Deviation
	DHP	:Double High Pass
	DIGITRON	:Digital Display Tube
	DL	:Delay line
	DOC	:Drop Out Compensator
	DUB	:Dubbing
	D/V SYNC	:Dummy Vertical Synchronization
E	E	:Emitter
	EE	:Electric to Electric
	EMPH	:Emphasis
	ENA	:Enable
	ENV	:Envelope
	EP	:Extended Play
	EQ	:Equalizer
	EXP	:Expander
F	F	:Fuse
	FB	:Feed Back
	FBC	:Feed Back Clamp
	FE	:Full Erase
	FF	:Fast Foward
	FG	:Frequency Generator
	FL	:Filter
	FM	:Frequency Modulation
	F/R	:Front/Rear
	FS	:Frequency Synthesizer
	FSC	:Subcarrier Frequency
	F/V	:Frequency Voltage
G	GEN	:Generator
H	H	:High, Horizontal
I	IC	:Integrated Circuit
	IF	:Intermediate Frequency
	INS	:Insert
L	L	:Low, Left, Coil
	LD	:Loading
	LV VTG CTL	:Loading Voltage Control
	LECHA	:Letter Character
	LM	:Level Meter
	LP	:Long Play
M	MAX	:Maximum
	MD	:Modulator
	MECHA. CTL	:Mechanism Control
	MIC	:Microphone
	MIN	:Minimum
	MIX	:Mixer, Mixing
	MM	:Mono Multi Vibrator
	MMV	:Monostable, Multivibrator
	MOD	:Modulation, Modulator
	MODEM	:Modulator-Demodulator
	MPX	:Multiplex
N	NR	:Noise Reduction
O	OSC	:Oscillator
	OSD	:On Screen Display
P	PB	:Playback
	PCB	:Printed Circuit Board
	P.CTL	:Power Control
	PER-AMP	:Preamplifier
	P.F	:Power Failure
	PG	:Pulse Generator
	PLL	:Phase Locked Loop
	PREM.DET	:Premire Detect
	P.P	:Peak-to-Peak
	PS	:Phase Shift
	PWM	:Pulse Width Modulation
	PWR.CTL	:Power Control
Q	Q	:Transistor
	QH	:Quasi Horizontal
	QSR	:Quick Setting Record
	QTR	:Quick Timer Record
	QV	:Quasi Vertical
R	R	:Resistor, Right
	RE(or RC)	:Remocon, Receiver
	REC	:Recording
	REC S. 'H'	:Record Start 'Hight'
	REF	:Reference
	REG	:Regulated, Regulator
	REMOCON	:Remote Control(unit)
	RF	:Radio Frequency
	R/P	:Record/Playback
	RTC	:Reel Time Counter
S	S	:Serial
	S.ACCEL	:Slow Accel
	SAOP	:Second Audio Program
	SC	:Scat, Simulcast
	S.DET	:Secam Detect
	SH	:Shift
	SHARP	:Sharpness
	SIF	:Sound Intermediate Frequency
	SLD	:Side Locking
	S/N	:Signal to Noise Ratio
	SP	:Standard Play
	ST	:Stereo
	SUB	:Subtract, Subcarrier
	SW or S/W	:Switch
	SYNC	:Synchronization
	SYSCON	:System Control
T	T	:Coil
	TP	:Test Point
	TR	:Transistor
	TRK	:Tracking
	TRANS	:Transformer
	TU	:Tuner, Take-Up
U	UHF	:Ultra High Frequency
	UNREG	:Unregulated
V	V	:Volt, Vertical
	VA	:Always Voltage
	VCO	:Voltage Controlled Oscillator
	VGC	:Voltage Gain Control
	VHF	:Very High Frequency
	V.H.SW	:Video Head Switch
	VISS	:VHS Index Search
	VPS	:Video Program System
	VR	:Variable Resistor or Volume
	V.SYNC	:Vertical Synchronization
	VTG	:Voltage
	VV	:Voltage to Voltage
	VXO	:Voltage X-tal Oscillator
W	W	:Watt
	WHT	:White
	W.O	:With Out
X	X-TAL	:Crystal
Y	Y/C	:Luminance/Chrominance
	YNR	:Luminance Noise Reduction
Z	ZD	:Zener Diode

IMPORTANT SAFETY PRECAUTIONS

Prior to shipment from the factory, the products are strictly inspected to conform with the recognized product safety and electrical codes of the countries in which they are to be sold. However, in order to maintain such compliance, it is equally important to implement the following precautions when a set is being serviced.

• Precautions during Servicing

1. Locations requiring special caution are denoted by labels and inscriptions on the cabinet, chassis and certain parts of the product. When performing service, be sure to read and comply with these and other cautionary notices appearing in the operation and service manuals.
2. Parts identified by the ⚠ symbol and shaded (■) parts are critical for safety.
   Replace only with specified part numbers.
   Note : Parts in this category also include those specified to comply with X-ray emission standards for products using cathode ray tubes and those specified for compliance with various regulations regarding spurious radiation emission.
3. Use Specified internal wiring. Note especially:
   1) Wires covered with PVC tubing
   2) Double insulated wires
   3) High voltage leads
4. Use specified insulating materials for hazardous live parts. Note especially :
   1) Insulation Tape
   2) PVC tubing
   3) Spacers
   4) Insulation sheets for transistor
5. When replacing AC primary side components (transformers, power cords, noise blocking capacitors, etc.) wrap ends of wires securely about the terminals before soldering. (Fig. 1)
6. Observe that wires do not contact heat producing parts (heatsinks, oxide metal film resistors, fusible resistors, etc.).
7. Check that replaced wires do not contact sharp edged or pointed parts.
8. When a power cord has been replaced, check that 10-15Kg of force in any direction will not loosen it. (Fig. 2)
9. Also check areas surrounding repaired locations.

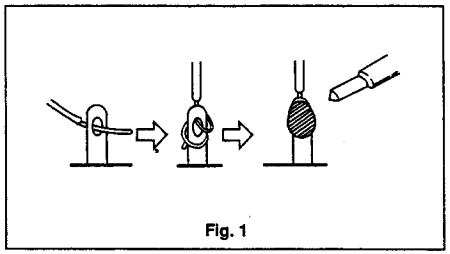


Fig. 1

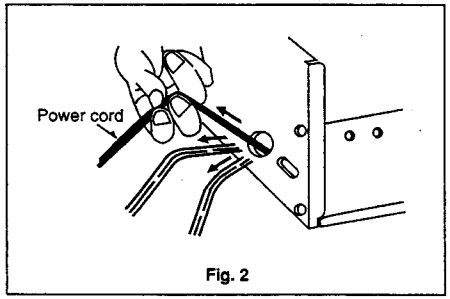


Fig. 2

10. Products using cathode ray tubes (CRTs)
    In regard to such products, the cathode ray tubes themselves, the high voltage circuits, and related circuits are specified for compliance with recognized codes pertaining to X-ray emission. Consequently, when servicing these products, replace the cathode ray tubes and other parts with only the parts specified. Under no circumstances attempt to modify these circuits. Unauthorized modification can increase the high voltage value and cause X-ray emission from the cathode ray tube.

SAFETY CHECK AFTER SERVICING

Examine the area surrounding the repaired location for damage or deterioration. Observe that screws, parts and wires have been returned to original positions. Afterwards, perform the following tests and confirm the specified values in order to verify compliance with safety standards.

• Insulation resistance test

Confirm the specified insulation resistance or greater between power cord plug prongs and externally exposed parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

• Dielectric strength test

Confirm specified dielectric strength or greater between power cord plug prongs and exposed accessible parts of the set (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.). See table below.

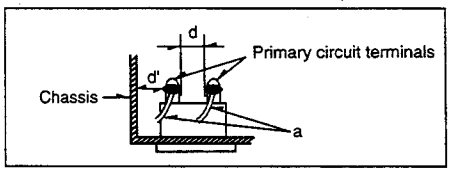


Fig. 3

• Clearance distance

When replacing primary circuit components, confirm specified clearance distance (d), (d') between soldered terminals, and between terminals and surrounding metallic parts. See table below.

Table 1 : Ratings for selected areas

AC Line Voltage	Region	Insulation Resistance	Dielectric Strength	Clearance Distance (d), (d')
* 110 to 130V 200 to 240V	Europe Australia	≧10MΩ/500V DC	4kV 1 minute	≧6mm (d) ≧8mm (d') (a Power cord)

* Class Ⅱ model only.
Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

• Leakage Current test

Confirm specified or lower leakage current between B (earth ground, power cord plug prongs) and externally exposed accessible parts (RF terminals, antenna terminals, video and audio input and output terminals, microphone jacks, earphone jacks, etc.).

Measuring Method : (Power ON)
Insert load Z between B (earth ground, power cord plug prongs) and exposed accessible parts. Use an AC voltmeter to measure across both terminals of load Z. See figure and following table.

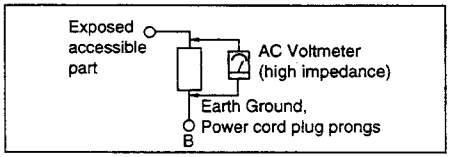


Fig. 4

Table 2 : Leakage current ratings for selected areas

AC Line Voltage	Region	Load Z	Leakage Current (i)	Earth Ground (B) to :
100 to 130V	Europe	2kΩ	i≦0.7m A peak i≦2m A dc	Antenna earth terminals
200 to 240V	Australia	50kΩ	i≦0.7m A peak i≦2m A dc	Other terminals

Note: This table is unofficial and for reference only. Be sure to confirm the precise values for your particular country and locality.

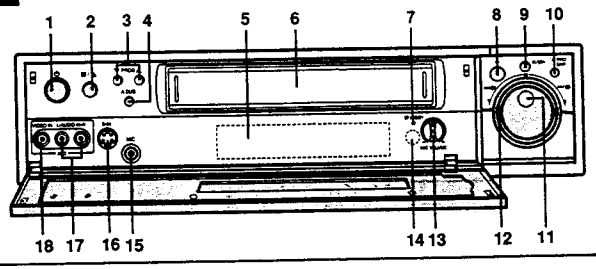
SPECIFICATIONS

General		
Power	:	100-240V~, 50Hz.
Power consumption	:	Approx. 27 watts (Energy saving mode:3 watts)
Video Head system	:	Double azimuth 4 heads, helical scanning system
Tape speed	:	23.39 mm/sec (SP mode)/ 11.69mm/sec (LP mode)
Tape format	:	Tape width 1/2" (12.7 mm high density VHS tape)
Maximum recording time	:	4 hours in SP mode/8 hours in LP mode (with E-240 tape)
Rewind time	:	Approx. 150 sec. (with E-180 tape)
Dimensions (W X H X D)	:	14.2" X 3.6" X 11.8" (360 X 92 X 290 mm)
Weight	:	9.0lbs. (4.1 kg)
Operating temperature	:	41° F-95° F (5° C-35° C)
Operating humidity	:	Less than 80%
Timer	:	24 hours display type
Video		
Television system	:	CCIR standard (625 lines, 50 fields) PAL/SECAM colour signal
Recording format	:	PAL/MESECAM
RF reception	:	PAL B/G, SECAM B/G
RF OUT	:	PAL G
Input level	:	VIDEO IN (Scart, RCA type) 1.0 Vp-p, 75 ohm, unbalanced
Output level	:	VIDEO OUT (Scart type) 1.0Vp-p, 75 ohm, unbalanced
Signal to noise ratio	:	More than 43 dBm
Audio		
Input level	:	AUDIO IN (Scart, RCA type) Scart type: 0 dBm, more than 10 kΩ RCA type : -6.0 dBm, more than 47 kΩ
Output level	:	AUDIO OUT (Scart, RCA type) Scart type : 0 dBm, less than 1 kΩ RCA type : -6.0 dBm, less than 1 kΩ
Audio track	:	Mono track & Hi-Fi track
Audio frequency response	:	Normal: 100 Hz-10kHz (-6/+3) Hi-Fi: 20 Hz-20 kHz (-3/+3 dB)
Audio signal to noise ratio	:	Hi-Fi audio: More than 75 dB (JIS A filter)
Audio dynamic range	:	Hi-Fi audio:More than 80 dB (JIS A filter)

- Design and specifications are subject to change without notice!

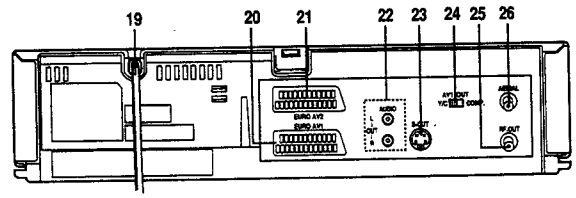
LOCATION OF CUSTOMER CONTROLS

FRONT



1. ⏻ POWER
2. STOP/EJECT
3. PROG. (▼/▲)
4. A.DUB
5. MULTI FUNCTION DISPLAY
6. VIDEO CASSETTE COMPARTMENT
7. STANDBY INDICATOR
8. ▷ PLAY
9. ▮▮/▸
10. REC/QSR
11. JOG DIAL
12. SHUTTLE RING
13. MIC VOLUME
14. REMOTE CONTROL SENSOR
15. MIC
16. S-IN
17. AUDIO INPUT TERMINALS (L/R)
18. VIDEO INPUT TERMINAL

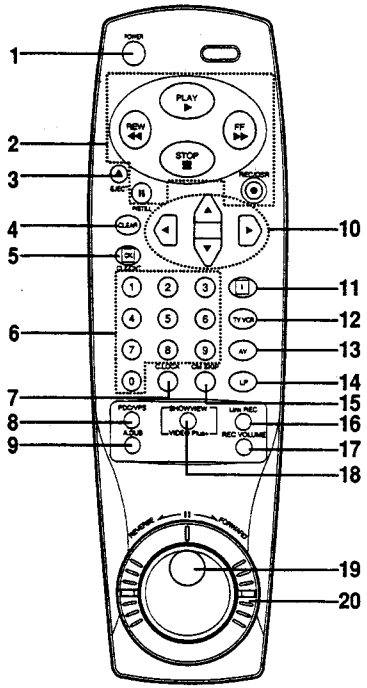
REAR



19. MAINS LEAD
20. EURO AV1
21. EURO AV2
22. AUDIO OUT TERMINALS (L/R)
23. S-OUT
24. AV1 OUT (Y/C, COMP.)
25. RF.OUT
26. AERIAL

LOCATION OF CUSTOMER CONTROLS

REMOTE CONTROL



1. POWER
2. BASIC OPERATION BUTTONS
3. EJECT
4. CLEAR
5. OK/CLOCK/TAPE COUNTER/ TAPE REMAINING
6. NUMBER BUTTONS
7. CHILD LOCK
8. PDC/VPS
9. A.DUB
10. CURSORS (▲, ▼, ◀, ▶)
11. i
12. TV/VCR
13. AV MODE
14. TAPE SPEED SELECT(LP)
15. CM SKIP
16. Link REC
17. REC VOLUME
18. SHOWVIEW
19. JOG DIAL
20. SHUTTLE RING

SECTION 2 CABINET & MAIN FRAME

SERVICE METHOD

Electrical Part

(1) Disassembly Flow

Top Case
↓
Bottom Cover
↓
Front Panel
↓
Housing & Deck Assembly
↓
Main C.B.A
↓
Timer C.B.A

(2) Re-assembly Flow service like Fig. 2-1

Timer C.B.A
↓
Main C.B.A
↓
Housing & Deck Assembly

(3) To check and replace Electrical parts
- ① Disassemble the unit according to No.1) Disassembly Flow.
- ② Re-assemble the unit according to No.2) Re-assemble Flow.
- ③ Place the unit like Fig. 2-1.
- ④ Check and replace Electrical parts.

Note :
- ① Insert Video Cassette Tape inversely like Fig. 2-1 to check and replace defective parts.
- ② In disassembling and reassembling, be careful not to damage CST switch.

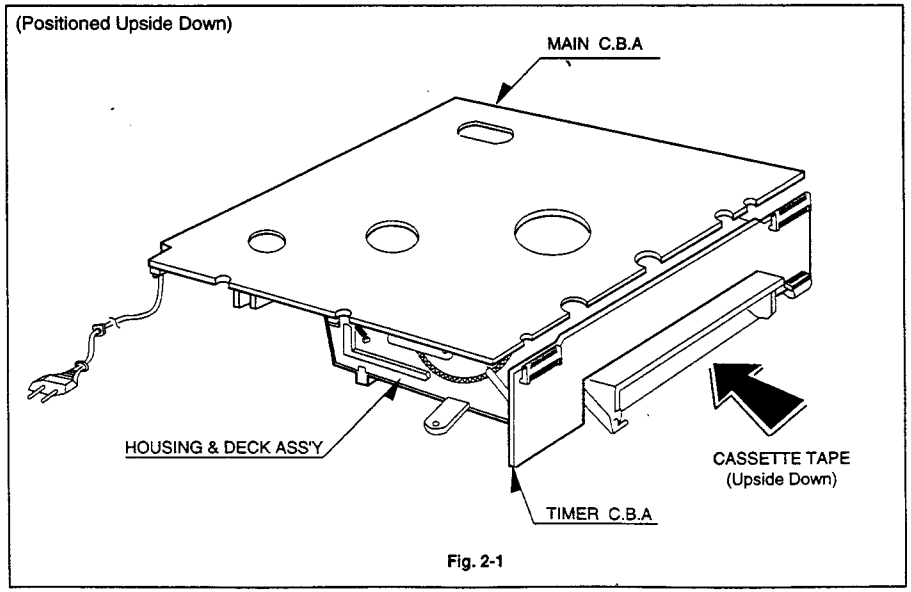


Fig. 2-1

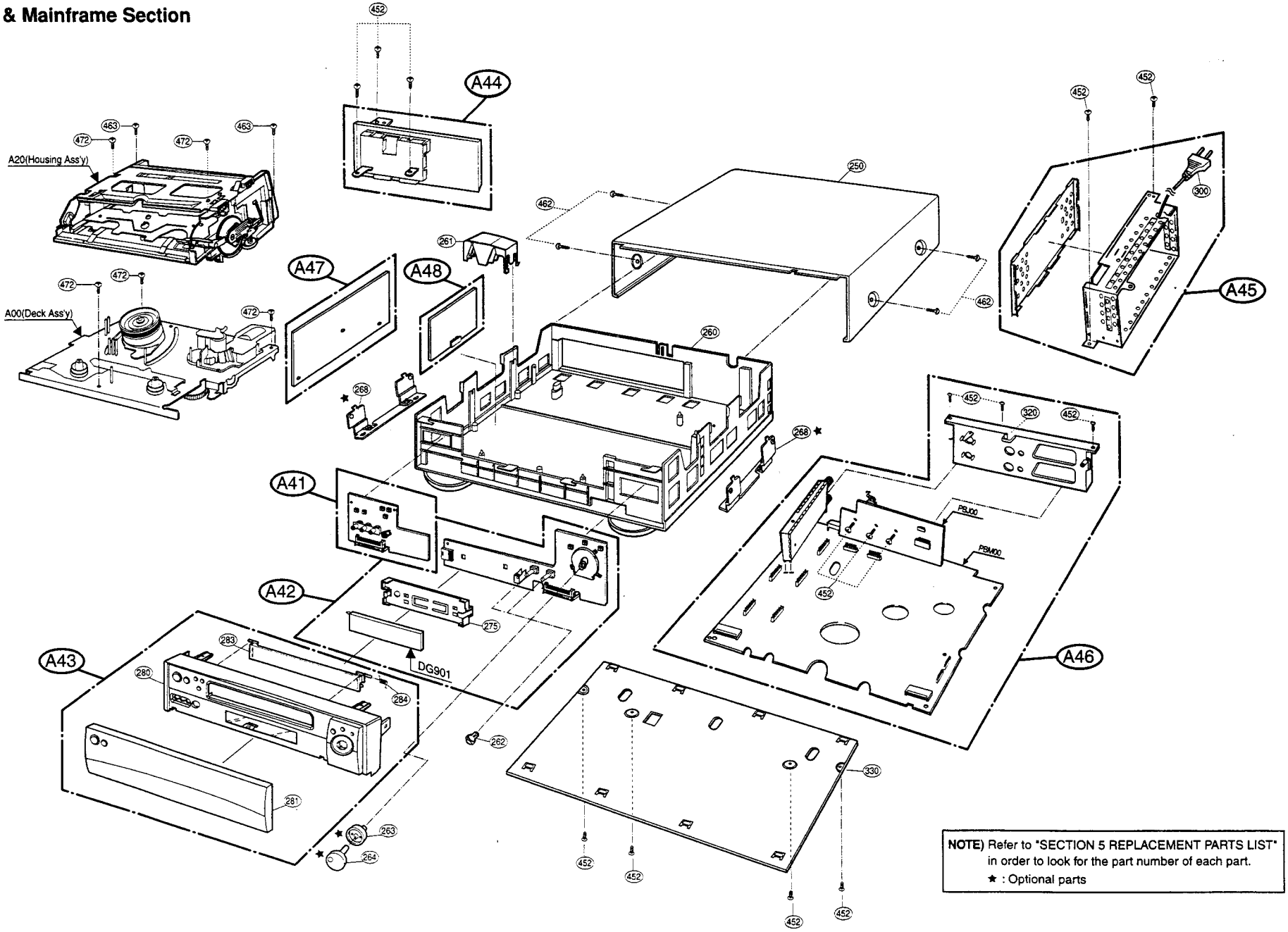
· Cabinet & Main Frame Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
				ASSEMBLY PARTS SECTION		
		A41	3501R-1062A	BOARD ASSY	KEY BOARD	
		A42	3501R-1061F	BOARD ASSY	TIMER	
		A43	3721R-F024K	PANEL ASSY,FRONT[NORMAL PARTS]	S909LP 3GL1L	
		A44	3501R-1064A	BOARD ASSY	PRE-AMP	
		A45	3501R-1063A	BOARD ASSY	SMPS	
		A46	3501R-1057E	BOARD ASSY	MAIN(S909LP)	
		A47	6871R-1059B	PWB(PCB) ASSY	Y/CBOARD	
		A49	6871R-1060A	PWB(PCB) ASSY	MPX BOARD	
				PARTS SECTION		
		250	3110R-0030A	CASE	TOP	
		260	3210R-0009B	FRAME	MAIN	NSP
		261	4930R-0023A	HOLDER	TUNER	
		262	4940R-V003A	KNOB	VOLUME	
		263	4940R-Z004B	KNOB	SHUTTLE(UVP-H396G)	
		264	4940R-Z003B	KNOB	JOG(UVP-H396G)	
		275	4930R-0024A	HOLDER	DIGITRON	
		280	3720R-F020B	PANEL	FRONT	NSP
		281	3551R-0007H	COVER ASSY	DOOR	NSP
		283	3580R-0022T	DOOR	CST	
		284	442-681A	SPRING	DOOR	
		300	6410RCL002B	POWER CORD	DW5000E(FILTER) DONGWON VDE 21	
		320	3721R-D015D	PANEL ASSY,DISTRIBUTOR[NORMAL		
		330	3550R-0159A	COVER	BOTTOM	
				SCREW		
		452	353-051A	SCREW	SPECIAL	
		462	353-136A	SCREW	SPECIAL(FBK) (353S353A)	
		463	1MBC0302418	BINDING HEAD MACHINE SCREW +	D 3.0 L 8.0 MSWR3/FZY	
		472	353-051E	SCREW	SPECIAL (3X12)	

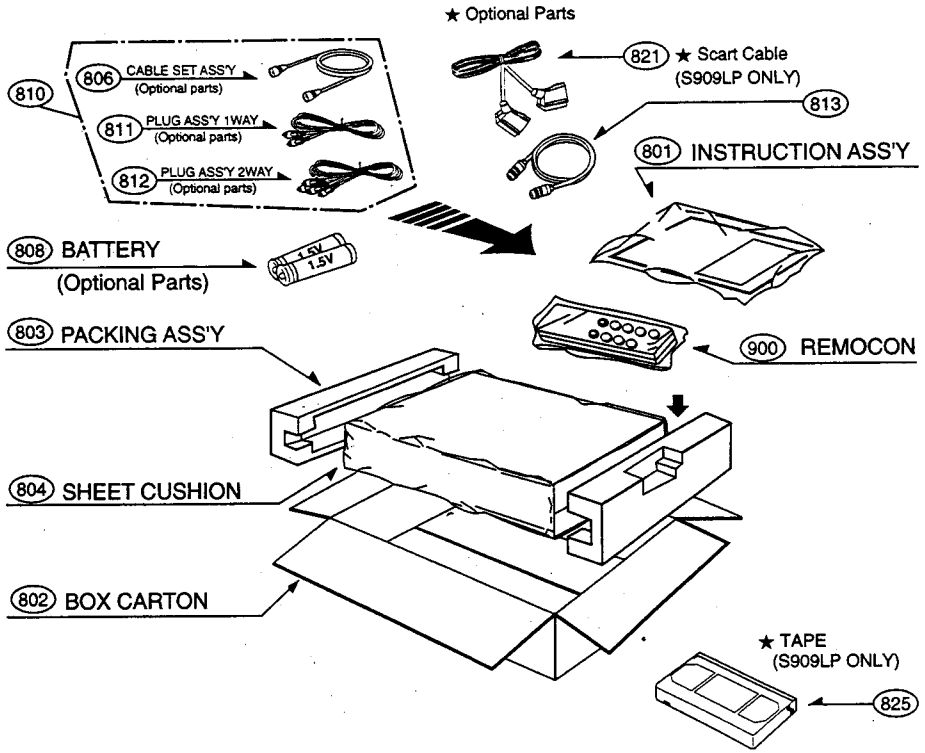
EXPLODED VIEWS

1. Cabinet & Mainframe Section



2. Packing & Accessory Section

NOTE) Refer to "SECTION REPLACEMENT PARTS LIST" in order to look for the part number of each part.

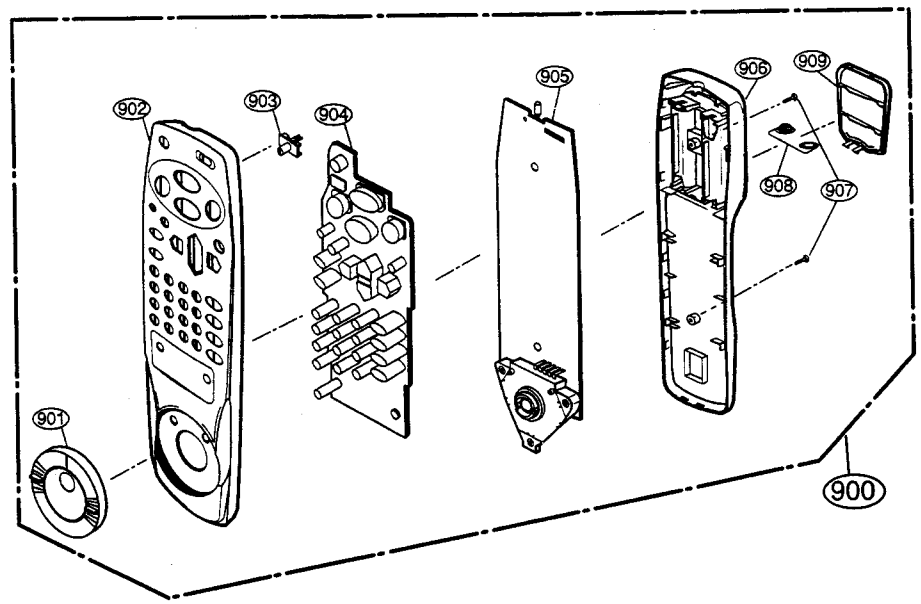


· Packing Accessory Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		801	3835RP0031H	INSTRUCTION ASSY	S909LP 3GL1L	
		802	3890R-H125A	BOX	S909LP 3GL1L SW3-A 1.095 2 FLX	
		803	3920R-0063A	PACKING	0.02 107 EPS 10 768 1596	
	OR	804	292-053B	BAG	SOFT(MIDI)	NSP
		804	3858R-0006A	SHEET	ROLL(W630XL300MX0.5T)	NSP
		806	861-033B	CABLE SET ASSY	RF-CABLE ASSY FTZ (D.D)	
		808	534-008C	BATTERY	AAAM(R03) 1.5V 1PAIR(LOCAL)	
		810	861-505K	CABLE SET ASSY	RF-CABLE ASSY PAL HI-FI FTZ	
		811	564-017B	PLUG ASSY	PHONO CORD 1WAY (YL)	
		812	564-018B	PLUG ASSY	PHONO CORD 2WAY (RD/WH)	
		813	683-002B	CABLE	S-VHS CORD SUAHN	
		821	861-045C	CABLE,COAXIAL	SCART+SCART CABLE (DONGDO)	
		825	453-100K	TAPE (CIRC)	S-VHS TAPE(PAL E-180)	

2. Remote Control Section



· Remote Control Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		900	6711R2P004A	REMOTE CONTROLLER ASSY	J4	

SECTION 3 ELECTRICAL

ELECTRICAL ADJUSTMENT PROCEDURES

1. Sepa Ref Voltage Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E	TP1	01	1.2 ± 0.01V	D.V.M

① Connect the Digital Voltage Meter to the TP1 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

③ To display the number of 01 on the digitron, press the right or left key on the remocon.

④ Adjust the DC Voltage to 1.2±0.01V, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

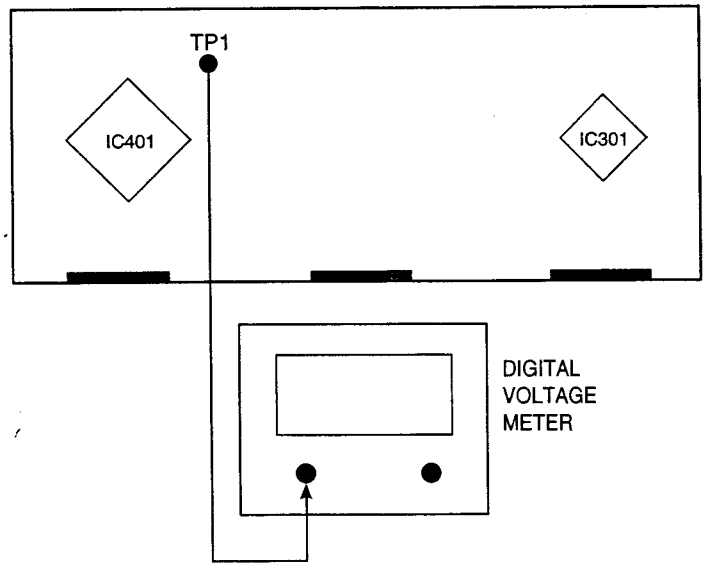


Figure 3-1

2. E-E Video Level Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E	TP2	02	2.05 ± 0.05Vp-p	SCOPE

① Connect the scope to the TP2 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time

③ To display the number of 02 on the digitron, press the right or left key on the remocon. .

④ Adjust the video level to 2.05±0.05Vp-p, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

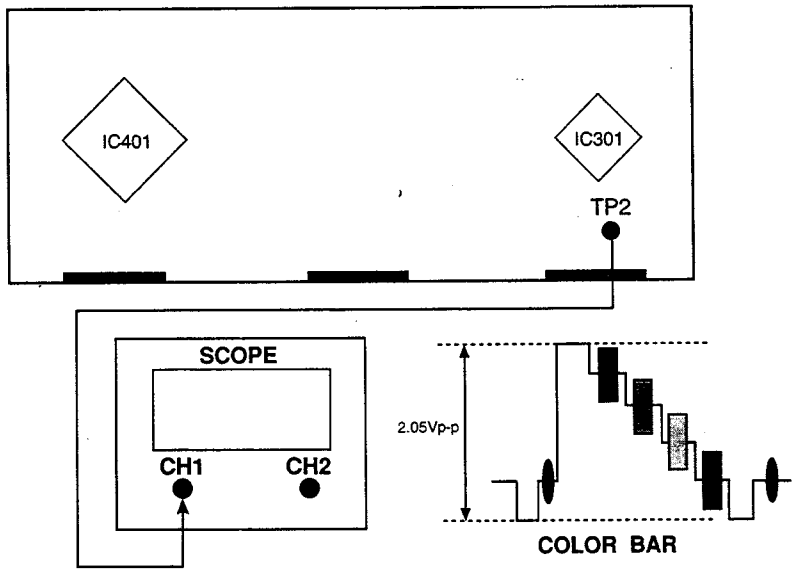


Figure 3-2

3. S-VHS PB Level Adjustment

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
PB S-VHS	TP2	03	2.1 ± 0.05Vp-p	SCOPE

① Connect the scope to the TP2 as shown below.

② Play the S-VHS SP test tape.

③ To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

④ To display the number of 03 on the digitron, press the right or left key on the remocon.

⑤ Adjust the V.OUT level to 2.1±0.05Vp-p, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

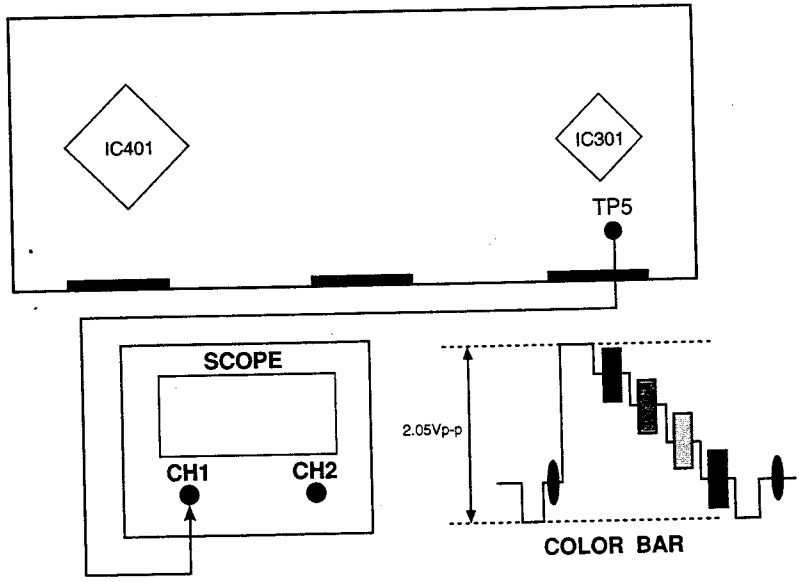


Figure 3-3

4. VHS PB Level Adjustment

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
PB VHS	TP2	03	2.05 ± 0.05Vp-p	SCOPE

① Connect the scope to the TP2 as shown below.

② Play the VHS SP test tape.

③ To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

④ To display the number of 03 on the digitron, press the right or left key on the remocon.

⑤ Adjust the V.OUT level to 2.05±0.05Vp-p, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

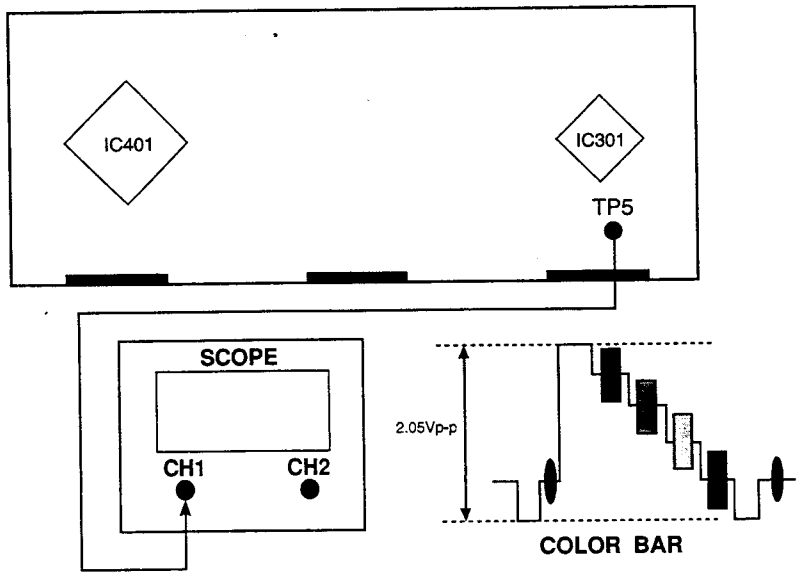


Figure 3-4

5. LC VCO Level Adjustment

MODE	TEST POINT	Adjustment Point	SPECIFICATION	TEST EQUIPMENT
PB VHS	IC301 PIN8	FL301	2.5 ± 0.1V	D.V.M

① Connect the Digital Voltage Meter to the IC301 PIN8 as shown below.

② Playback a VHS SP Test tape and vary FL301 so that the DC voltage of IC301 PIN8 is to be 2.5 ± 0.1V.

Y/C BOARD Solder Side

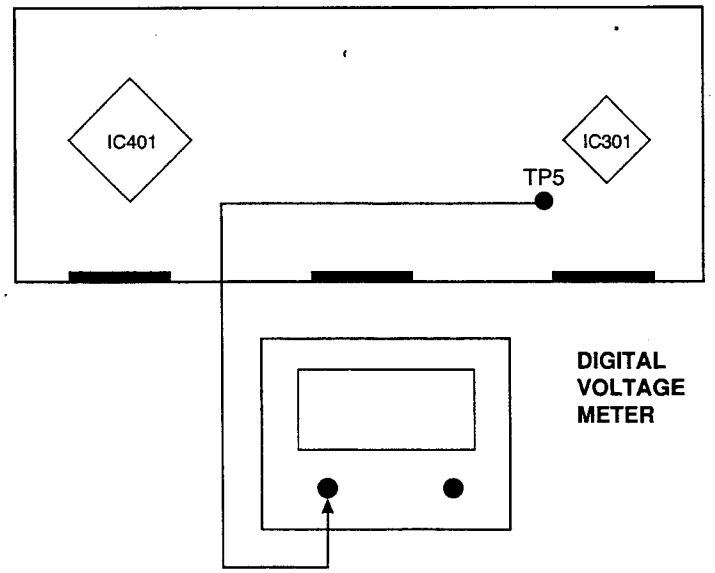


Figure 3-5

6. Sub-Emphasis Level Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E	TP3	06	0.4 ± 0.05Vp-p	SCOPE

① Connect the scope to the TP3 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

③ To display the number of 06 on the digitron, press the right or left key on the remocon.

④ Adjust the level to 0.4±0.05Vp-p, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

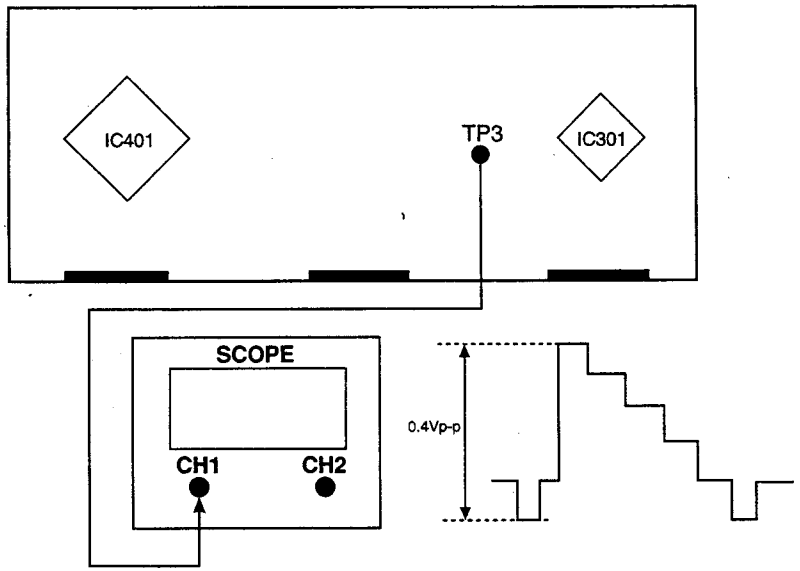


Figure 3-6

7. S-VHS White Clip Level Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E S-VHS	TP4	04	210 ± 10%	SCOPE

① Connect the Scope to the TP4 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time

③ To display the number of 04 on the digitron, press the right or left key on the remocon.

④ Adjust the Clip Level to 210±10%, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

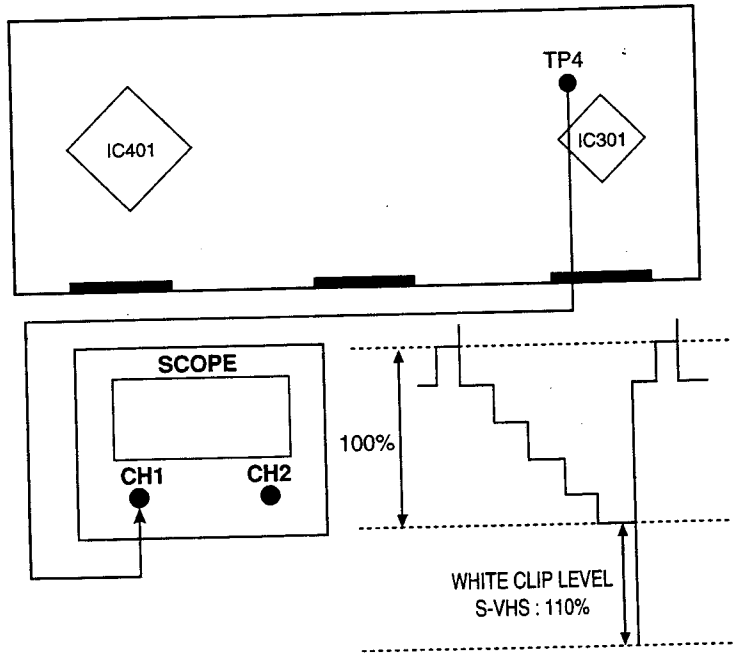


Figure 3-7

8. VHS White Clip Level Adjustment

★ *The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).*

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E VHS	TP4	04	190 ± 10%	SCOPE

① Connect the Scope to the TP4 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

③ To display the number of 04 on the digitron, press the right or left key on the remocon.

④ Adjust the Clip Level to 190± 10%, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

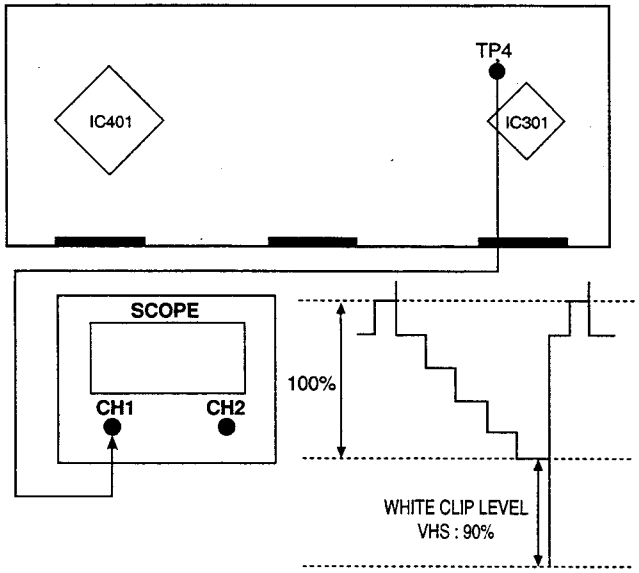


Figure 3-8

9. S-VHS Carrier Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E S-VHS	TP5	05	5.4 ± 0.05MHz	MODEM TEST

① Connect the Modem Test to the TP5 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

③ To display the number of 05 on the digitron, press the right or left key on the remocon.

④ Adjust the waveform to 5.4±0.05MHz, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

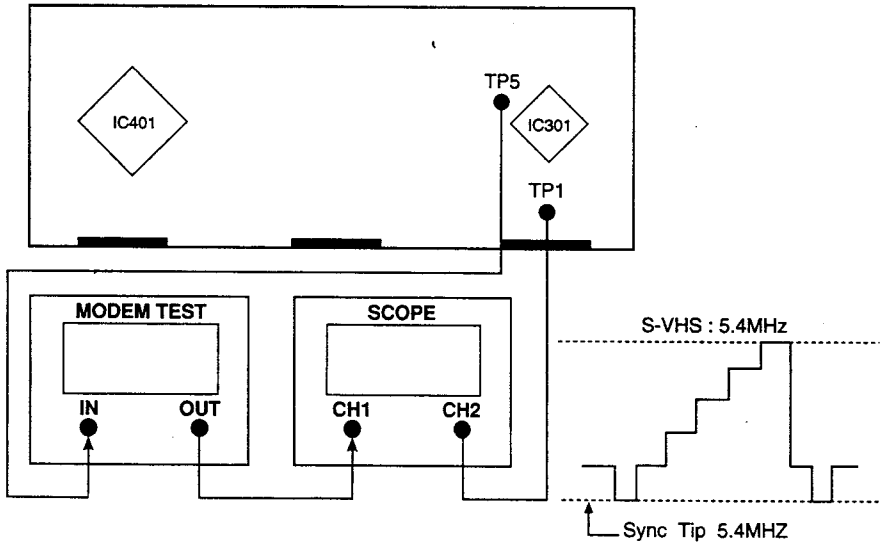


Figure 3-9

10. S-VHS Deviation Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E S-VHS	TP5	06	1.6 ± 0.05MHz	MODEM TEST

① Connect the Modem Test to the TP5 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

③ To display the number of 06 on the digitron, press the right or left key on the remocon.

④ Adjust the waveform to 1.6±0.05MHz, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

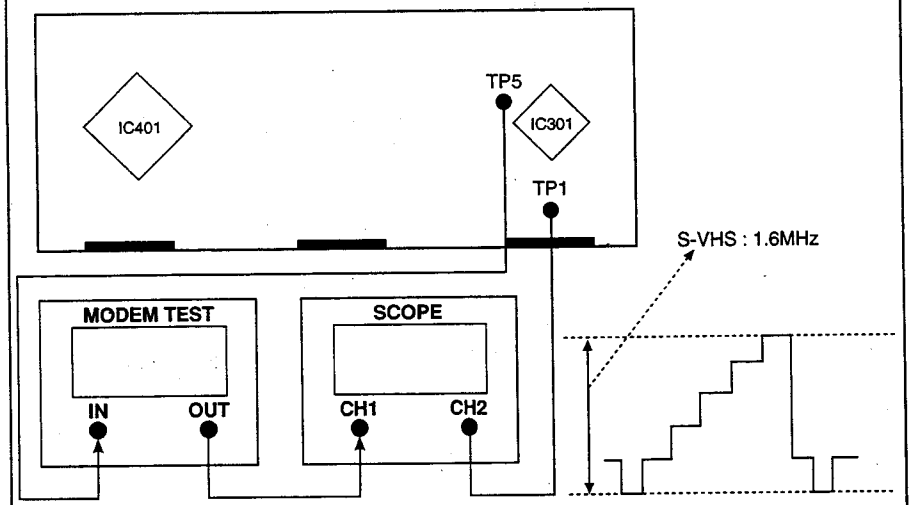


Figure 3-10

11. VHS Carrier Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E VHS	TP5	05	3.8 ± 0.05MHz	MODEM TEST

① Connect the Modem Test to the TP5 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

③ To display the number of 05 on the digitron, press the right or left key on the remocon.

④ Adjust the waveform to 3.8±0.05MHz, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

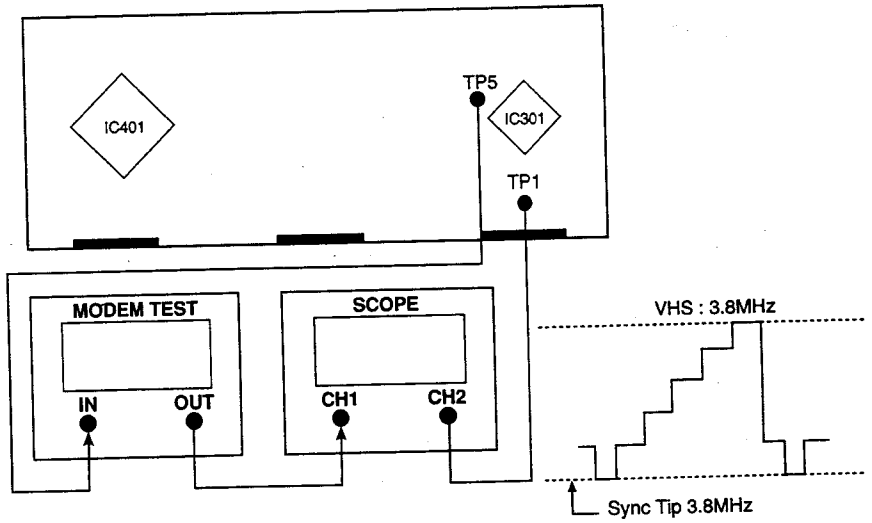


Figure 3-11

12. VHS Deviation Adjustment

★ The Input signal for this adjustment is based on the SCART1(100% COLOR BAR).

MODE	TEST POINT	DIGITRON NO.	SPECIFICATION	TEST EQUIPMENT
E-E VHS	TP5	06	1.0 ± 0.05MHz	MODEM TEST

① Connect the Modem Test to the TP5 as shown below.

② To display the Jig Mode on the digitron, press the OK key on the remocon and the REC key on the VCR at the same time.

③ To display the number of 06 on the digitron, press the right or left key on the remocon.

④ Adjust the waveform to 1.0±0.05MHz, pressing the tracking (CH) up and down key on the remocon.

Y/C BOARD Solder Side

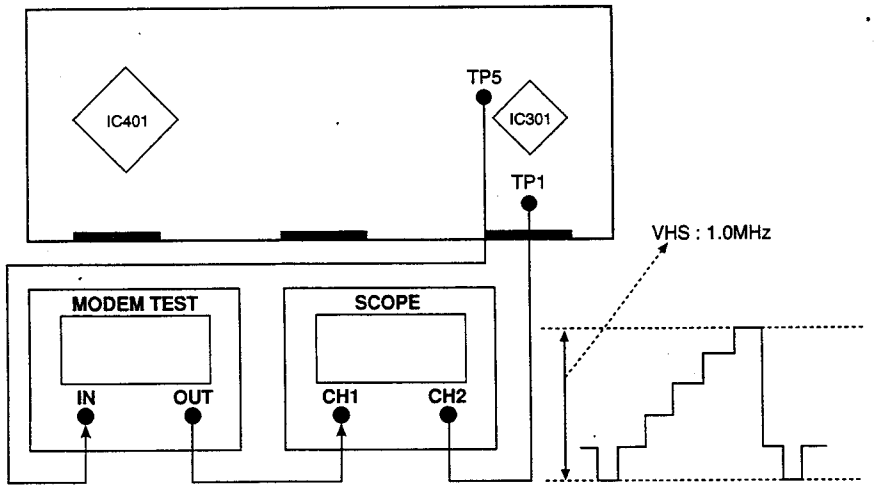


Figure 3-12

13. Servo Adjustment

1) PG Adjustment

- **TEST EQUIPMENT**

a) OSCILLOSCOPE
b) PAL TEST TAPE (VHS SP)

- **ADJUSTMENT AND SPECIFICATION**

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
PLAY	V.Out H/SW(TP602)	VR501	7.5 ± 0.5H

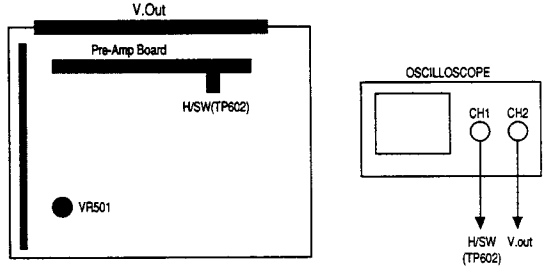
- **ADJUSTMENT PROCEDURE**

a) Insert the PAL SP Test Tape and play.
Note - Adjust the distance of X, pressing the Tracking(+) or Tracking(-) when the "ATR" is blink after the PAL SP Test Tape is inserted.

b) Connect the CH1 of the oscilloscope to the H.SW (TP602) and CH2 to the Video Out for the VCR.

c) Trigger the mixed Video Signal of CH2 to the CH1 H.SW, and then check the distance (time difference), which is from the selected A(B) Head point of the H.SW signal to the starting point of the vertical synchronized signal, to 7.5H (480uS, 1H=64uS)

- **CONNECTION**



- **WAVEFORM**

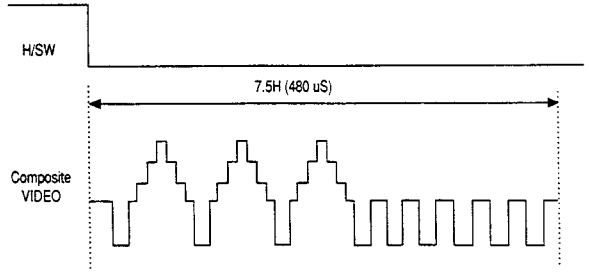


Figure 3-13 CONNECTION

14. Audio Adjustment

1. Normal Audio Rec Bias Adjustment

- **TEST EQUIPMENT**

a) LEVEL METER
b) RECORD TAPE

- **ADJUSTMENT or SPECIFICATION**

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
REC	W809 W810	VR801	3.0mV ± 0.1mV

- **ADJUSTMENT PROCEDURE**
  a. Connect the AC Millivolt Meter to the W809 and W810 in the record mode without signal.
  b. Adjust the voltage to 3.0±0.1mVrms with VR801 at this time.

- **CONNECTION**

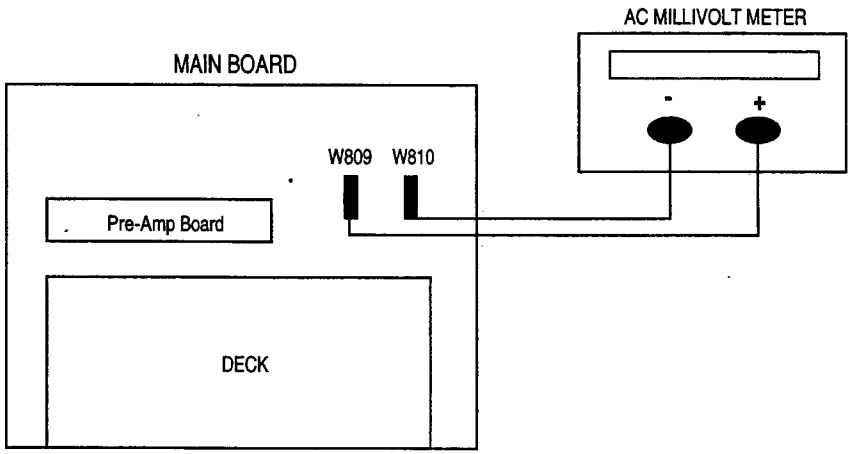


Figure 3-14

15. Stereo Separation Adjustment

1) Normal Audio Bias Adjustment

- **TEST EQUIPMENT**

a) OSCILLOSCOPE

- **ADJUSTMENT AND SPECIFICATION**

MODE	MEASUREMENT POINT	ADJUSTMENT POINT	SPECIFICATION
CH09 Central Signal Stereo Mode	RCA Out L/R	VR752	Adjust the Audio Level for RCA Out L CH to 10mV~20mV the VR752.

- **ADJUSTMENT PROCEDURE**
  a. Receive the Stereo Mode from the CH09 central signal.
  b. Connect the RCA Out L/R to the oscilloscope.
  c. Adjust the signal value of the L CH(RCA Out) to within the range of 10mV~20mV with the VR752.

- **CONNECTION**

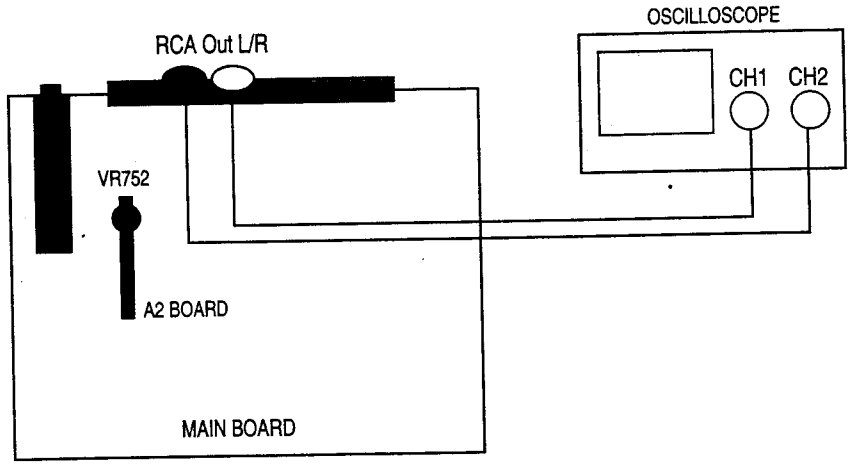
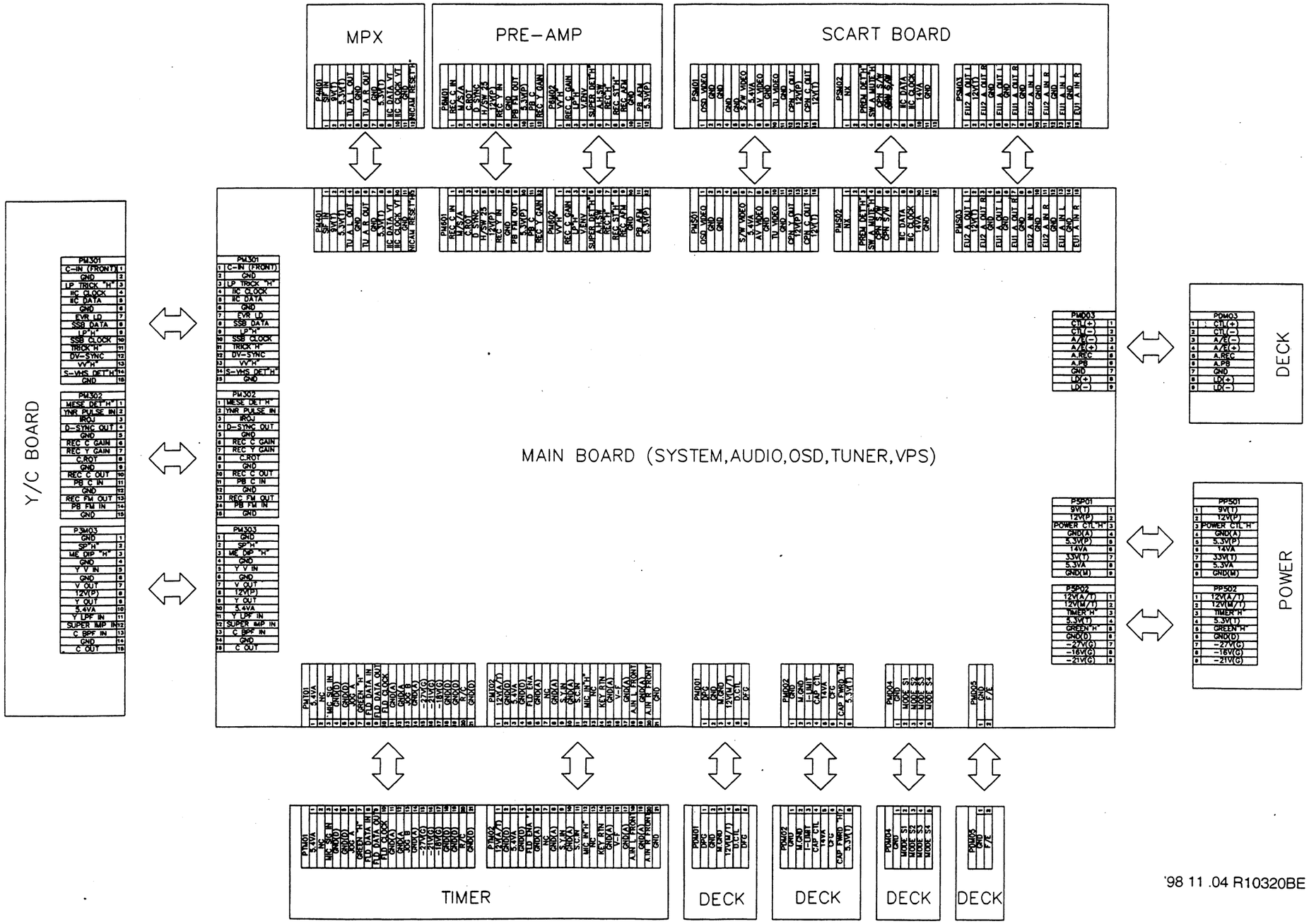


Figure 3-15

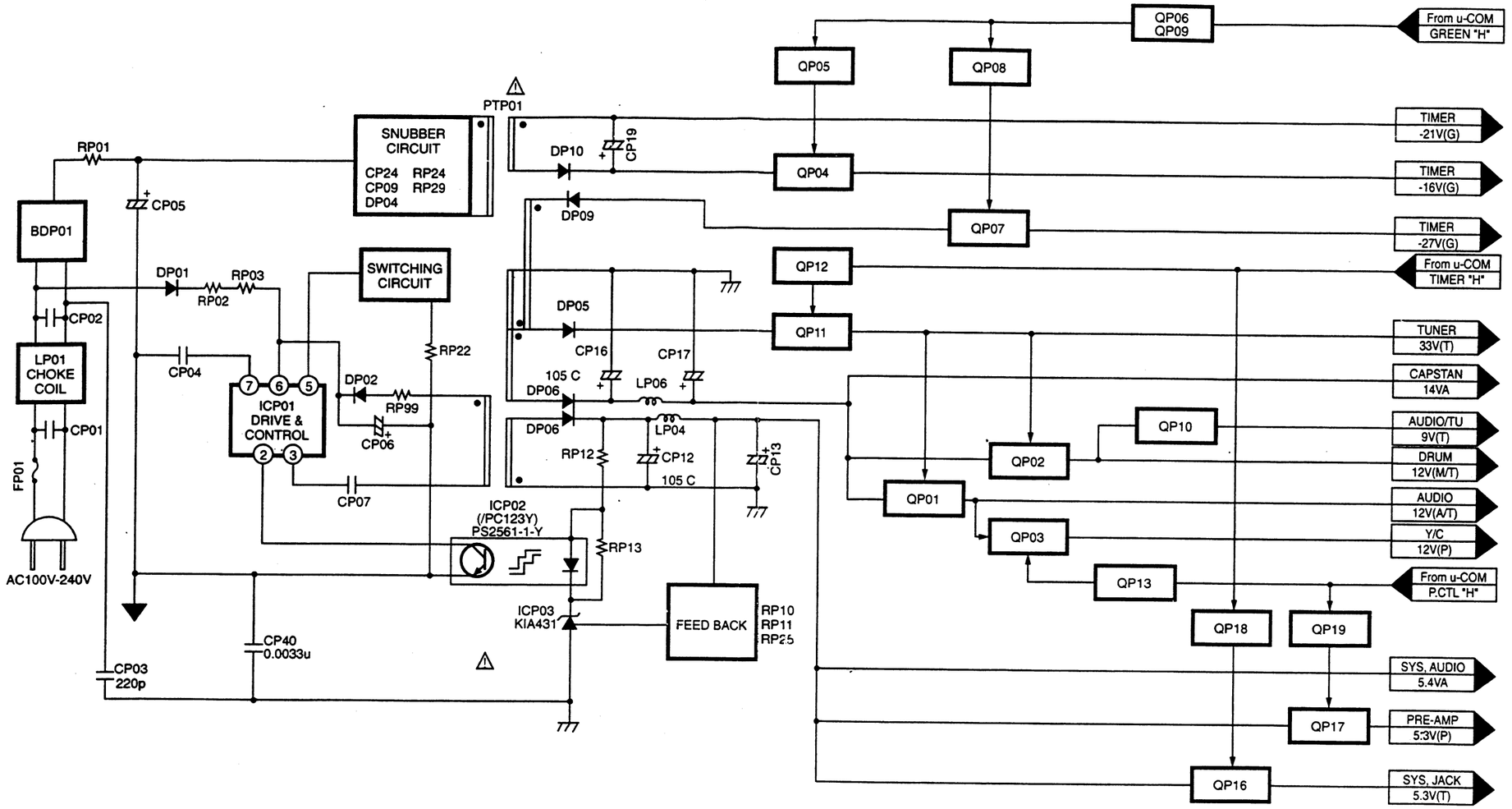
BLOCK & CIRCUIT DIAGRAMS

1. Overall Wiring Diagram



'98 11 .04 R10320BE

2. Power (SMPS) Block Diagram



★ POWER TR Voltage Sheet

Port. / TR No.	Emitter		Collector		Base	
	PB	REC	PB	REC	PB	REC
QP01	12.12	12.12	13.73	13.73	13.25	13.25
QP02	12.11	12.11	13.73	13.73	13.24	13.24
QP03	12.01	12.01	12.01	12.01	11.32	11.32
QP04	-15.7	-15.7	-15.6	-15.6	-15.0	-15.0
QP05	5.3	5.3	5.2	5.2	0.0	0.0
QP06	0.0	0.0	0.0	0.0	3.9	3.9
QP07	-28.8	-28.8	-28.1	-28.1	-28.7	-28.7
QP08	5.3	5.3	5.2	5.2	0	0
QP09	0.0	0.0	3.9	3.9	0.0	0.0
QP10	9.31	9.31	12.1	12.1	9.93	9.93
QP11	35.2	35.2	35.1	35.1	34.5	34.5
QP12	0.0	0.0	0.0	0.0	0.7	0.7
QP13	0.0	0.0	0.0	0.0	0.7	0.7
QP16	5.3	5.3	5.2	5.2	4.5	4.5
QP17	5.31	5.31	5.29	5.29	4.57	4.57
QP18	0.0	0.0	0.0	0.0	0.73	0.73
QP19	0.0	0.0	0.0	0.0	0.73	0.73

★ POWER IC Voltage Sheet

PB(REC)

1.90 (3.3)	13.4 (1.99)	1.98 (13.6)	3.3 (1.98)
8	ICP01 (KA7552)		5
1			4
(1.90)	(1.02)	(0.01)	(0.0)

PB(REC)

ICP02

1			4
4.93 (4.94)	3.91 (3.91)	0.0 (0.0)	3.9 (3.9)

PB(REC)

ICP03

1		3
2.5 (2.5)	0.0 (0.0)	3.9 (3.9)

★ POWER Oscilloscope Waveform

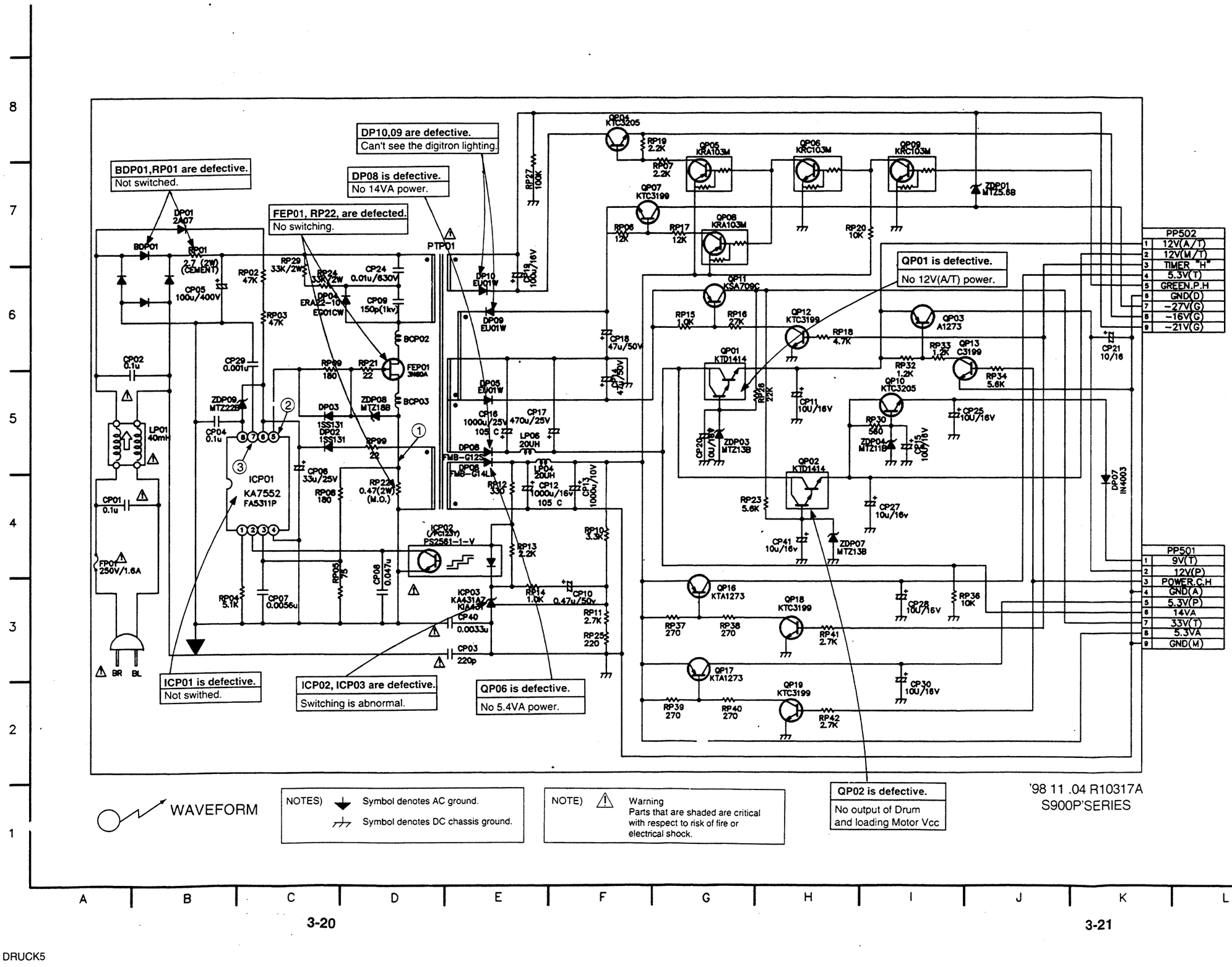
'98 11 .04 R10317BA

① 0.5V/div, 5us/div

② ICP01 Pin⑤ 0.5V/div, 5us/div

③ ICP01 Pin⑦ 50V/div, 50us/div

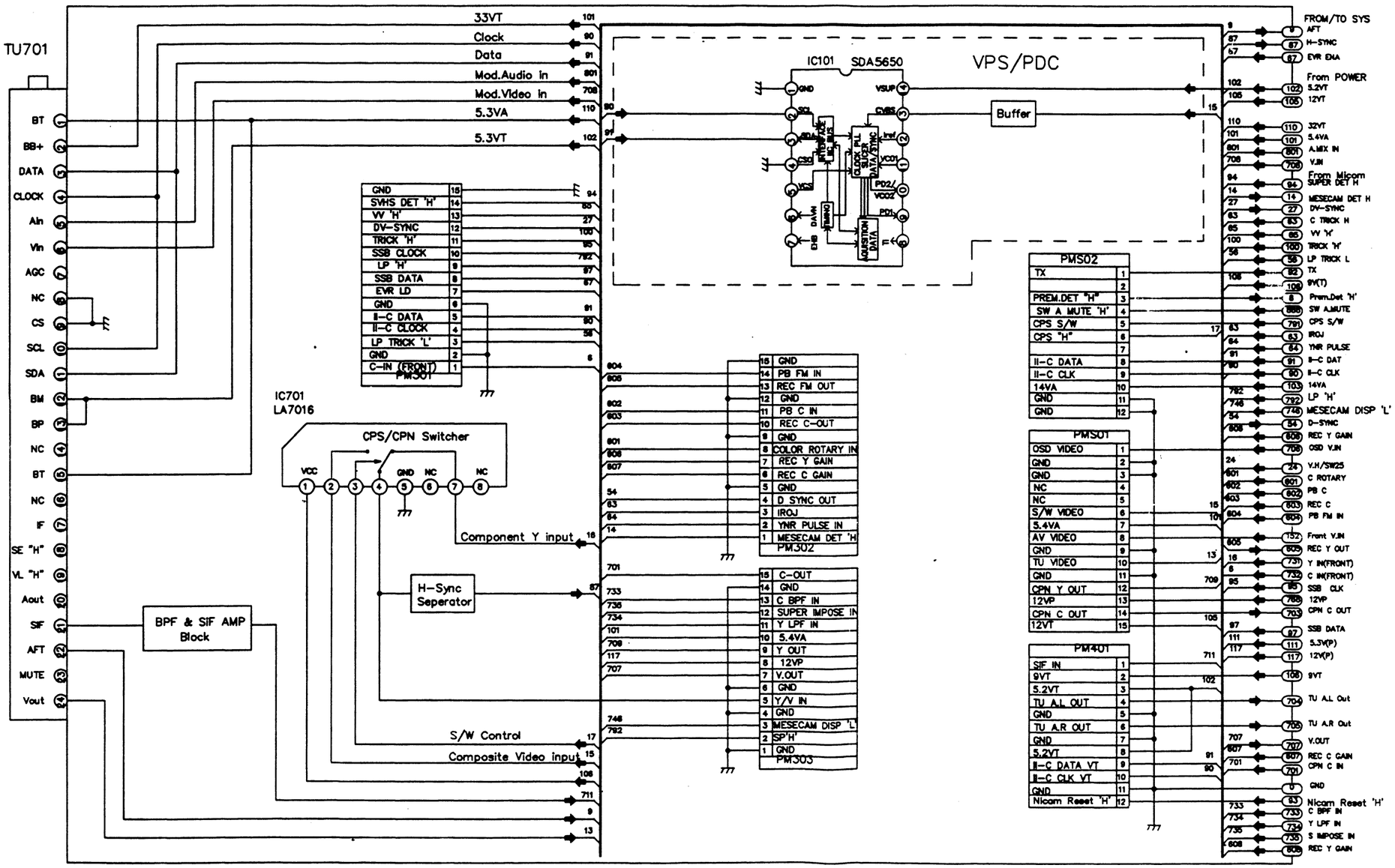
2. Power (SMPS) Circuit Diagram



LOCATION GUIDE

BCP02	D6	RP11	F3
BCP03	D5	RP12	E4
BDP01	B7	RP13	E4
CP01	A4	RP14	E3
CP02	A6	RP15	G6
CP03	E3	RP16	G6
CP04	B5	RP17	G7
CP05	B6	RP18	H6
CP06	C4	RP19	F8
CP07	C3	RP20	H7
CP08	D3	RP21	D6
CP09	D6	RP22	D4
CP10	F3	RP23	G4
CP11	H5	RP24	C6
CP12	E4	RP25	F3
CP13	F4	RP26	H5
CP14	F5	RP27	E7
CP15	I5	RP29	C7
CP16	E5	RP30	I5
CP17	E5	RP32	I6
CP18	F6	RP33	I6
CP19	E6	RP34	J5
CP20	G5	RP36	I3
CP21	K6	RP37	G3
CP24	D6	RP38	G3
CP25	I5	RP39	G2
CP27	I4	RP40	G2
CP28	I3	RP41	H3
CP29	B6	RP42	H2
CP30	I2	RP99	D5
CP40	E3	ZDP01	J7
CP41	H4	ZDP03	G5
DP01	B7	ZDP04	I5
DP02	C5	ZDP07	H4
DP03	C5	ZDP08	D5
DP04	C6	ZDP09	B5
DP05	E5		
DP06	E5		
DP07	K4		
DP08	E5		
DP09	E6		
DP10	E6		
FEP01	D5		
FP01	A4		
ICP01	C4		
ICP02	D4		
ICP03	E3		
LP01	B5		
LP04	E5		
LP06	E5		
PP501	K4		
PP502	K7		
PTP01	D7		
QP01	G6		
QP02	H5		
QP03	I6		
QP04	F8		
QP05	G8		
QP06	H8		
QP07	F7		
QP08	G7		
QP09	I8		
QP10	I5		
QP11	G6		
QP12	H6		
QP13	I6		
QP16	G3		
QP17	G3		
QP18	H3		
QP19	H2		
RP01	B7		
RP02	C6		
RP03	C6		
RP04	B3		
RP05	C3		
RP06	F7		
RP07	G7		
RP08	C4		
RP09	C6		
RP10	F4		

3. Tuner/IF & VPS/PDC Block Diagram



★ Tu/IF & VPS/PDC TR Voltage Sheet

(EE MODE)

Port No.	Emitter	Base	Collector
Q702	3.1	3.7	3.5
Q703	5.2	5.0	3.5
Q704	0	0	2.5
Q706	0.3	1	3.4
Q707	0	0	4.0
Q101	2.5	2.5	2.5
Q102	0	5.2	0
Q103	1.3	1.8	5.2

★ Tu/IF & VPS/PDC IC Voltage Sheet

Tu701

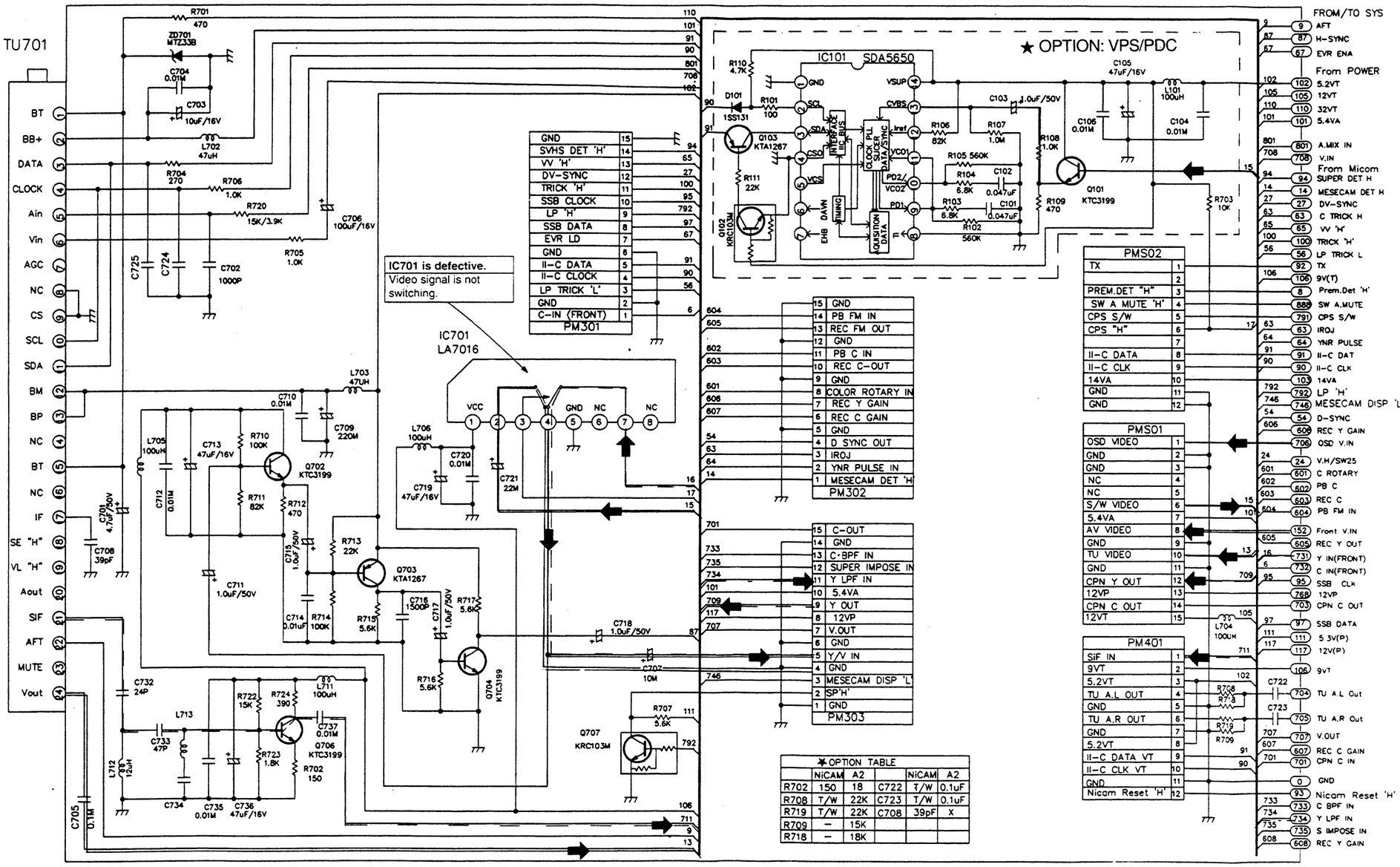
32.7	1	
4.95		
2.5		
2.5		
0	5	
0		
1.6		
0		
0		
2.5	10	
2.5		
5.1		
5.1		
5.1		
0		
32.7	15	
0		
0		
0		
0		
2.4	20	
3.6		
2.8		
0		
3.8	24	

IC101 (SDA 5650)

0	1	5.2
2.7		1.5
2.7		1.6
0		2.5
2.6	5	2.6
2.6	10	2.5
2.6		0

'98 11 .04 R10323BA

3. Tuner/IF & VPS/PDC Circuit Diagram

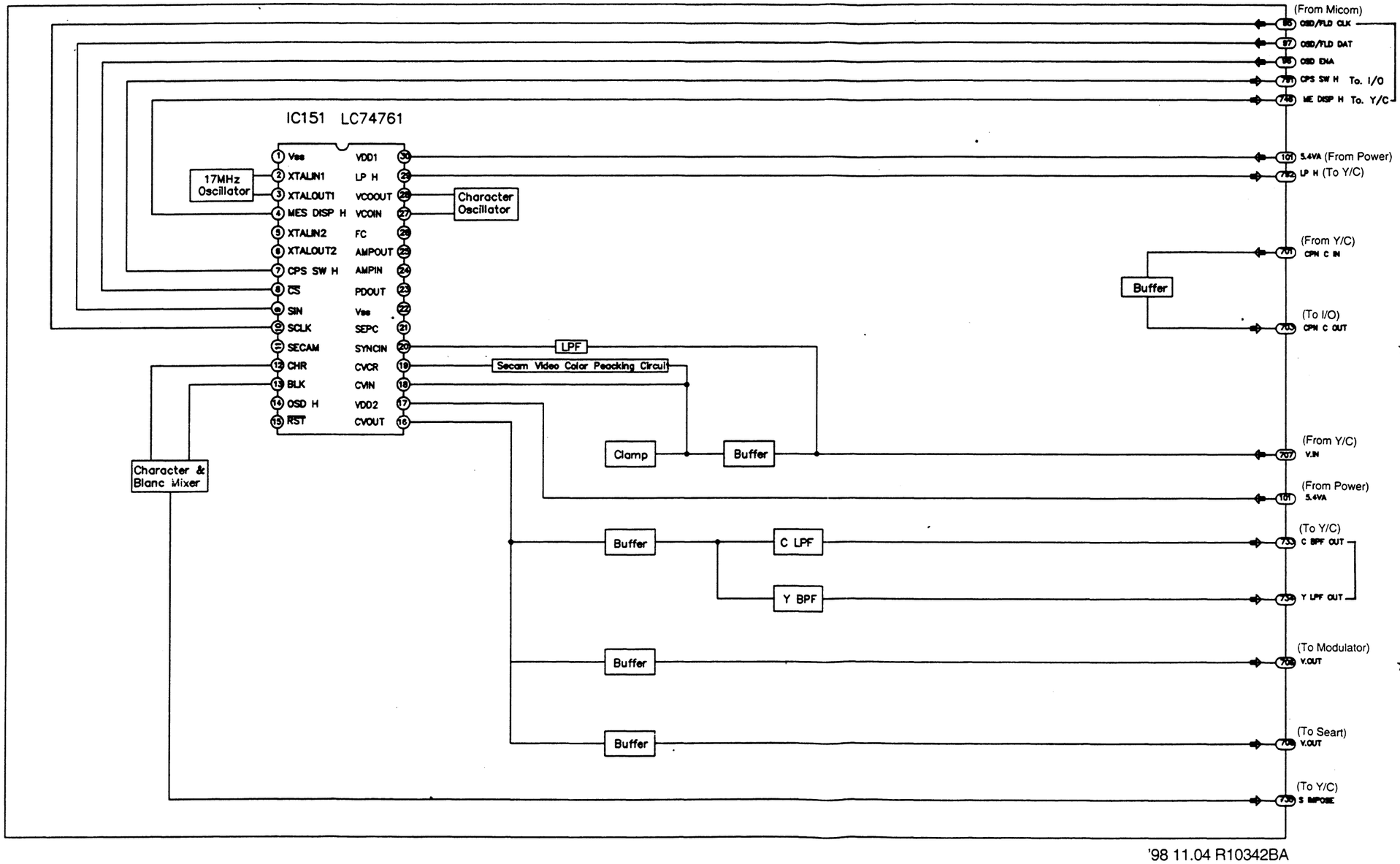


'98 11 .04 R10323A
S900'S

LOCATION GUIDE

C101	I7	R702	C2
C102	I7	R703	K7
C103	I8	R704	B7
C104	J7	R705	C6
C105	J8	R706	C7
C106	J7	R707	F3
C701	B4	R708	K3
C702	C6	R709	K3
C703	B8	R710	C5
C704	B8	R711	C4
C705	B2	R712	C4
C706	D7	R713	D4
C707	F3	R714	C3
C708	B4	R715	D3
C709	D5	R716	D3
C710	C5	R717	E4
C711	C4	R718	K3
C712	B4	R719	K3
C713	C5	R720	C7
C714	C3	R722	C3
C715	C4	R723	C2
C716	D4	R724	C3
C717	D3	TU701	A8
C718	F3	ZD701	B8
C719	D5		
C720	E5		
C721	E5		
C722	K3		
C723	K3		
C724	B6		
C725	B6		
C732	B3		
C733	B2		
C734	B2		
C735	C2		
C736	C2		
C737	D3		
D101	G8		
IC101	G8		
IC701	D6		
L101	J8		
L702	C7		
L703	D5		
L704	K3		
L705	B5		
L706	D5		
L711	D3		
L712	B2		
L713	B3		
PM301	E6		
PM302	H4		
PM303	H3		
PM401	J3		
PMS01	J5		
PMS02	J6		
Q101	J7		
Q102	G7		
Q103	G7		
Q702	C5		
Q703	D4		
Q704	E3		
Q706	D2		
Q707	F3		
R101	G8		
R102	I7		
R103	H7		
R104	I7		
R105	I7		
R106	H7		
R107	I7		
R108	I7		
R109	I7		
R110	G8		
R111	G7		
R701	C8		

4. OSD Block Diagram



'98 11.04 R10342BA

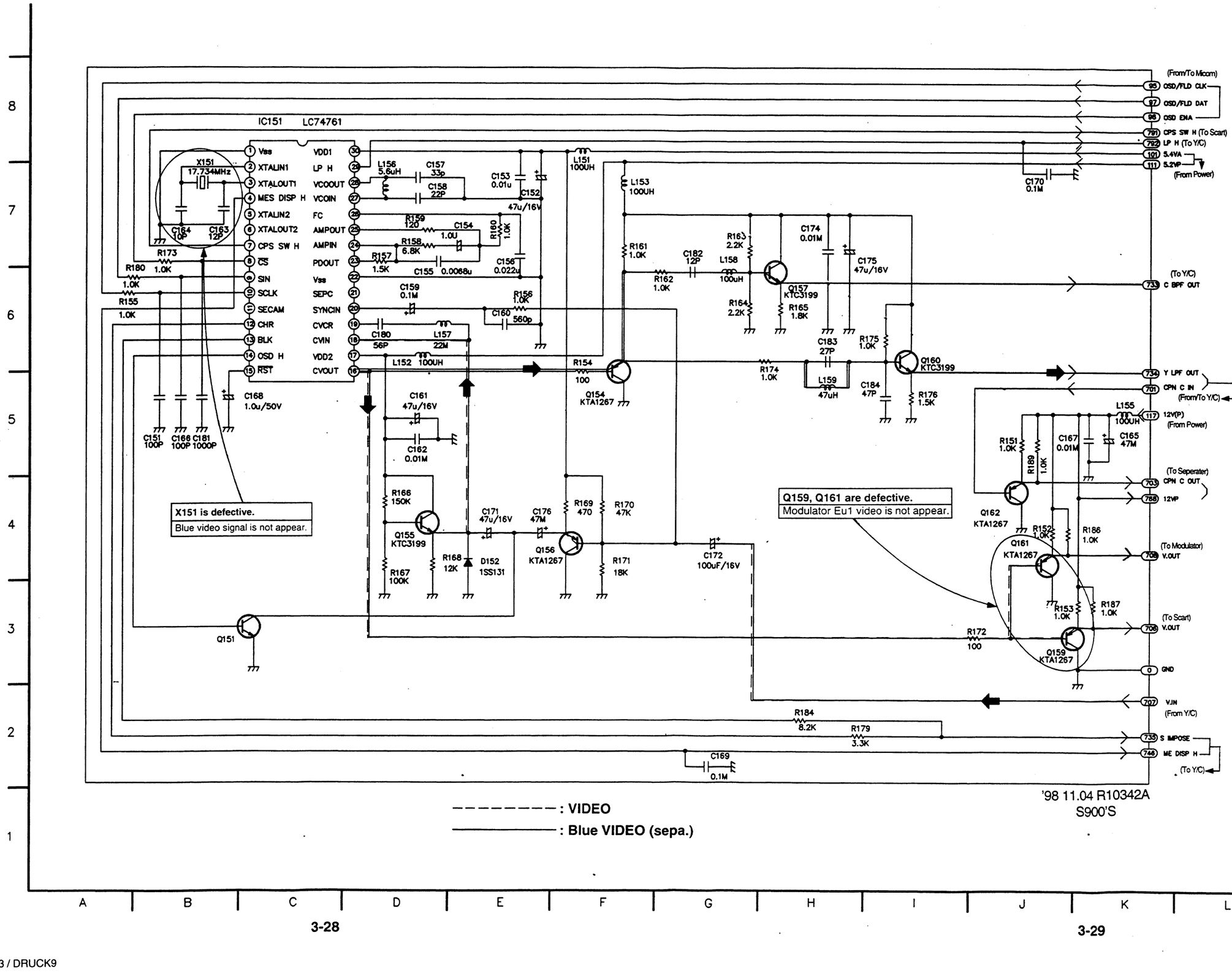
★ OSD IC Voltage Sheet

0	1	30	5.2
2.5			0
2.7			2.7
5.0			2.6
4.8	5		2.4
5.2		25	2.4
0	IC151		2.8
2.5	(LC74761)		2.8
2.6	10		0
2.6			2.0
2.6		20	3.0
0(2.5)			0.7
0(2.5)			2.5
0			5.3
5.0	15		2.5

★ OSD TR Voltage Sheet

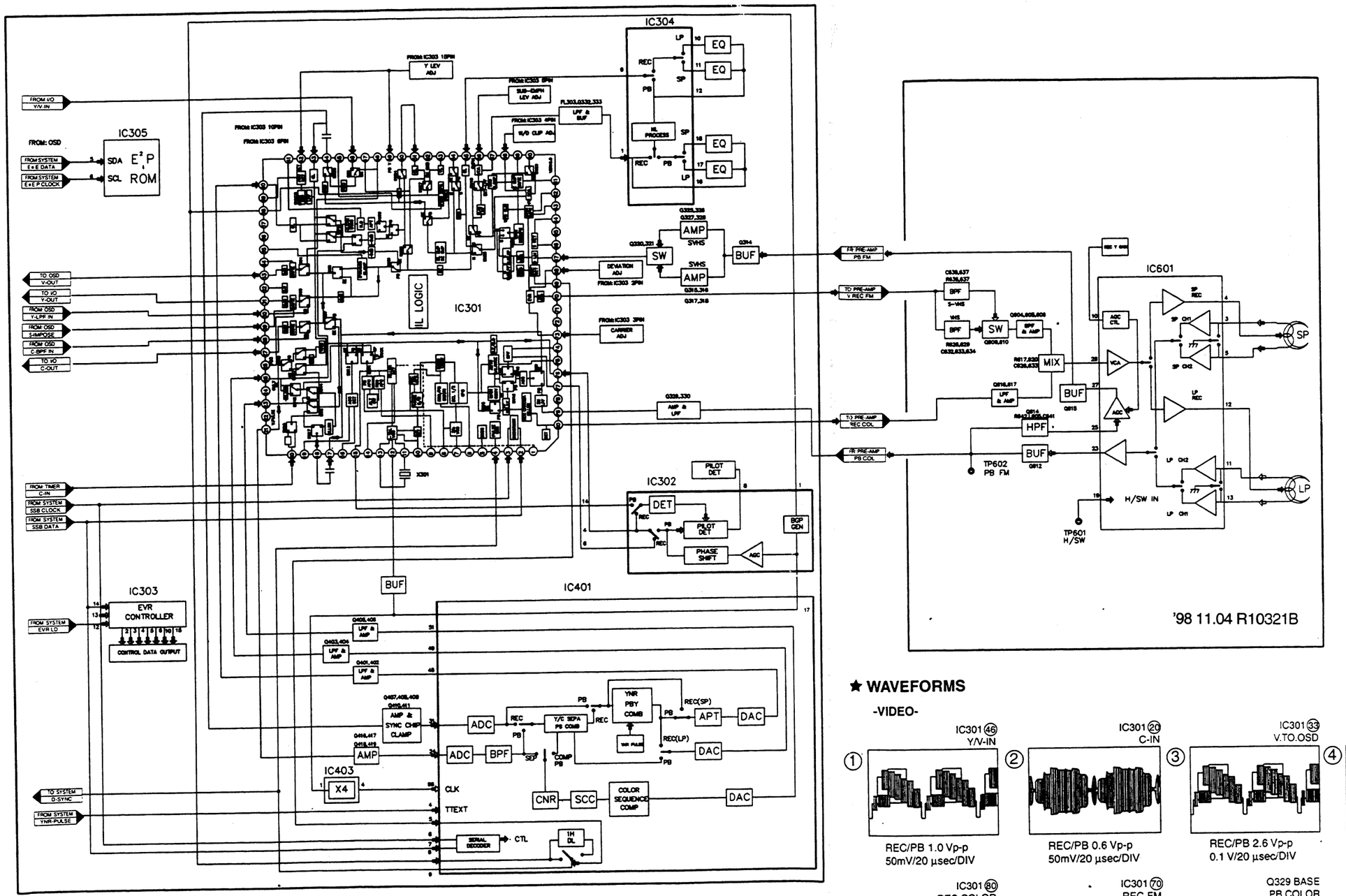
Port / TR No.	Emitter	Base	Collector
Q154	3.0	2.3	0
Q155	2.4	2.0	5.3
Q156	2.4	1.9	0
Q157	2.0	2.7	5.3
Q159	3.0	2.5	0
Q160	3.5	4.1	5.3
Q161	3.0	2.5	0
Q162	2.8	2.1	0

4. OSD Circuit Diagram



C151	B5
C152	E7
C153	E7
C154	E7
C155	D6
C156	E7
C157	D7
C158	D7
C159	D6
C160	E6
C161	D5
C162	D5
C163	B7
C164	B7
C165	K5
C166	B5
C167	J5
C168	C5
C169	G2
C170	J7
C171	E4
C172	G4
C174	H7
C175	H7
C176	E4
C180	D6
C181	B5
C182	G7
C183	H6
C184	H5
D152	E4
IC151	C8
L151	F7
L152	D6
L153	F7
L155	K5
L156	D7
L157	D6
L158	G7
L159	H5
Q151	B3
Q154	F5
Q155	D4
Q156	E4
Q157	H6
Q159	J3
Q160	I6
Q161	J4
Q162	J4
R151	J5
R152	J4
R153	J3
R154	F6
R155	A6
R156	E6
R157	D7
R158	D7
R159	D7
R160	E7
R161	F7
R162	F6
R163	G7
R164	G6
R165	H6
R166	D4
R167	D4
R168	D4
R169	F4
R170	F4
R171	F4
R172	I3
R173	B7
R174	H6
R175	H6
R176	I5
R179	H2
R180	A6
R184	H2
R186	K4
R187	K3
R189	J5
X151	B7

5. 6. 7, Y/C // Separator // Pre-Amp Block Diagram



★ Y/C TR Voltage Sheet

PORT / TR NO.	Emitter		Collector		Base	
	REC	PB	REC	PB	REC	PB
Q301	0	0	0	0	3.7	3.7
Q302	0	0	0	0	0	0
Q303	0	0	0	0	4.0	4.0
Q304	0	0	4.0	4.0	0	0
Q305	2.0	2.0	0	0	1.4	1.4
Q306	0	0	0	0	0	0
Q307	0	0	0	0	3.9	3.9
Q310	0	0	0.8	0.8	0	0
Q311	0	0	0.9	0.9	0	0
Q312	0	0	0	0	4.9	4.9
Q313	4.9	4.9	5.0	5.0	5.5	5.5
Q314	1.8	1.8	0	0	1.2	1.2
Q315	1.4	1.4	10.3	10.3	2.0	2.0
Q316	9.8	9.8	11.8	11.8	10.4	10.4
Q317	10.4	10.4	2.1	2.1	9.7	9.7
Q318	0	0	1.3	1.3	0	0
Q319	9.7	9.7	11.8	11.8	10.4	10.4
Q320	4.1	4.1	11.8	11.8	2.0	2.0
Q321	4.1	4.1	11.8	11.8	4.7	4.7
Q322	2.1	2.1	9.6	9.6	2.7	2.7
Q323	0	0	0	0	3.4	3.4
Q324	0	0	0	0	0	0
Q325	10.3	10.3	1.5	1.5	9.6	9.6
Q326	9.6	9.6	11.8	11.8	10.3	10.3
Q327	10.3	10.3	1.5	1.5	9.7	9.7
Q328	9.6	9.6	11.8	11.8	10.3	10.3
Q329	1.8	1.8	2.8	2.8	2.4	2.4
Q330	2.2	2.2	4.7	4.7	2.8	2.8
Q331	0	0	0	0	5.0	5.0
Q332	2.6	2.6	0	0	2.0	2.0
Q333	2.6	2.6	4.8	4.8	3.3	3.3
Q334	0	0	0	0	3.7	3.7
Q335	0	0	0	0	0	0

★ WAVEFORMS

-VIDEO-

① IC301 (46) Y/V-IN
REC/PB 1.0 Vp-p
50mV/20 µsec/DIV

② IC301 (20) C-IN
REC/PB 0.6 Vp-p
50mV/20 µsec/DIV

③ IC301 (33) V.TO.OSD
REC/PB 2.6 Vp-p
0.1 V/20 µsec/DIV

④ IC301 (31) Y.OUT
REC/PB 2.2 Vp-p
0.1 V/20 µsec/DIV

⑤ IC301 (27) C.OUT
REC/PB 1.5 Vp-p
0.1 V/20 µsec/DIV

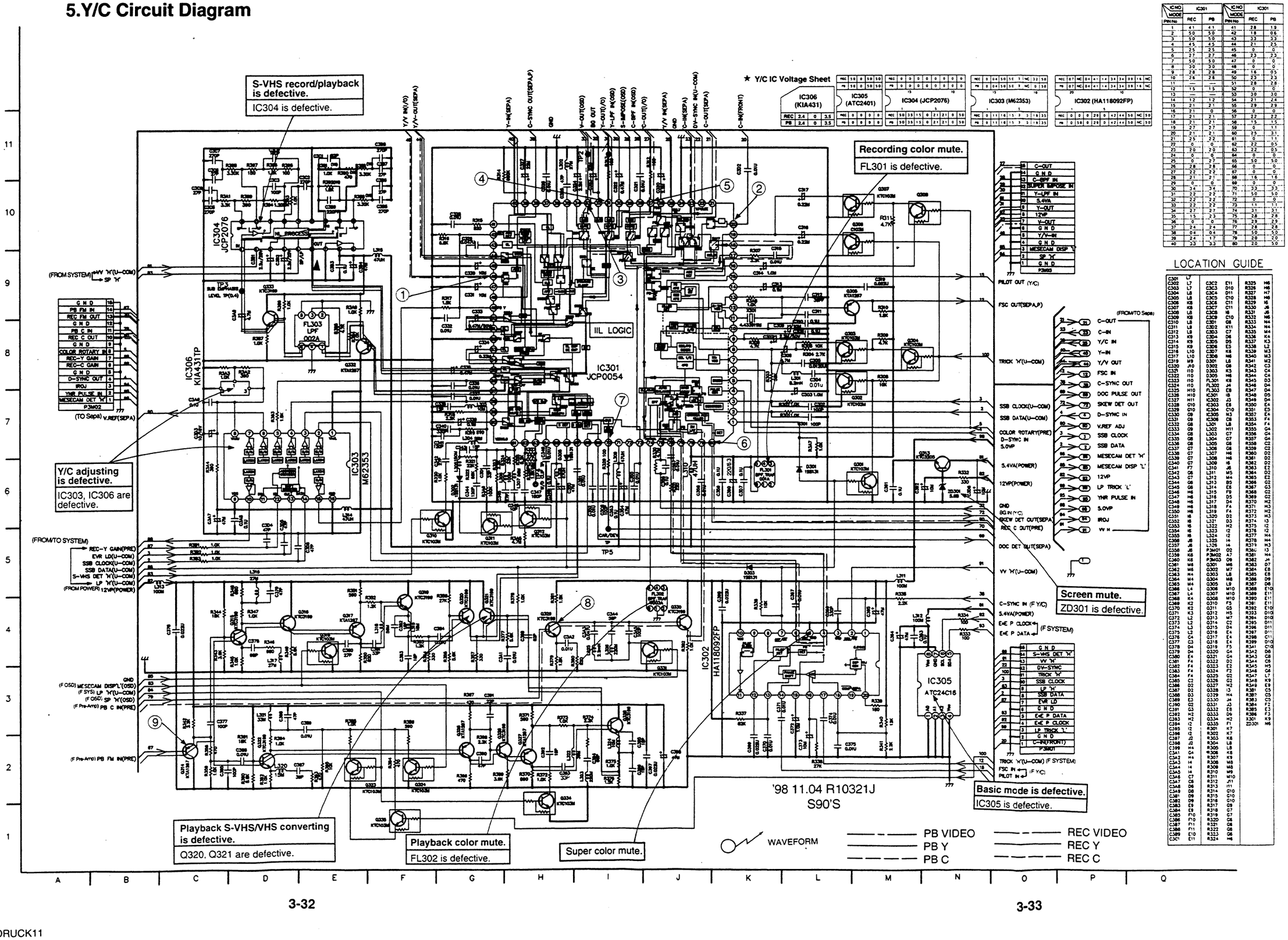
⑥ IC301 (80) REC COLOR
REC/PB 0.63 Vp-p
20mV/20 µsec/DIV

⑦ IC301 (70) REC FM
REC 0.4 Vp-p
10mV/5 msec/DIV

⑧ Q329 BASE PB COLOR
PB 0.5 Vp-p
20mV/20 µsec/DIV

⑨ Q314 BASE PB FM
PB 0.6 Vp-p
20mV/5 msec/DIV

5.Y/C Circuit Diagram



★ Y/C IC Voltage Sheet

	IC306 (KIA431)		
REC	2.4	0	3.5
PB	2.4	0	3.5

IC305 (ATC2401)

REC	0	0	0	0	0	0	0	0
PB	0	0	0	0	0	0	0	0

IC304 (JCP2076)

REC	5.0	0	5.0	5.0	3.5	1.5	0	2.1	2.1	0	2.1	2.1	0	5.0	5.0	3.5	0	0	0	0
PB	5.0	0	5.0	5.0	3.5	1.5	0	2.1	2.1	0	2.1	2.1	0	5.0	5.0	3.5	0	0	0	0

IC303 (M62353)

REC	0	0	0.4	5.0	5.0	1.5	0	3.2	3.2	1.9	3.3	0	0.4	5.0	5.0	3.2	3	1.9	3.3	0
PB	0	0	0.4	5.0	5.0	3	0	3.2	3	1.9	3.3	0	0.4	5.0	5.0	3	3	1.9	3.3	0

IC302 (HA118092FP)

REC	0.7	NC	0.4	4.1	1.4	2.4	3.4	0.9	1.6	NC	0	0	0	2.9	0	4.2	4.4	5.0	NC	5.0
PB	0.7	NC	0.4	4.1	1.4	2.4	3.5	0.9	1.6	NC	0	0.5	0	2.9	5	4.2	4.4	5.0	NC	5.0

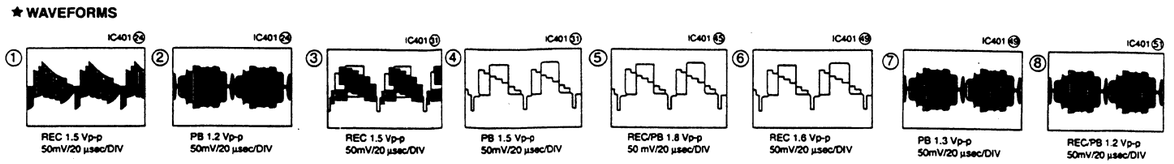
IC NO / MODE	IC301	
PIN No	REC	PB
1	4.1	4.1
2	5.0	5.0
3	5.0	5.0
4	4.5	4.5
5	2.5	2.5
6	2.7	2.7
7	5.0	5.0
8	3.9	3.9
9	2.8	2.8
10	2.6	2.6
11	—	—
12	1.5	1.5
13	—	—
14	1.2	1.2
15	2.1	2.1
16	2.1	0
17	2.1	2.1
18	2.1	2.1
19	2.7	2.7
20	2.1	2.1
21	2.5	2.2
22	0	0
23	2.0	2.0
24	0	0
25	0	2.7
26	2.8	2.8
27	2.2	2.2
28	2.1	2.1
29	0	0
30	3.4	3.4
31	2.2	2.2
32	2.2	2.2
33	2.2	2.2
34	2.7	2.7
35	1.5	2.3
36	0	0
37	2.4	2.4
38	0.4	0.4
39	2.4	1.7
40	3.3	3.3

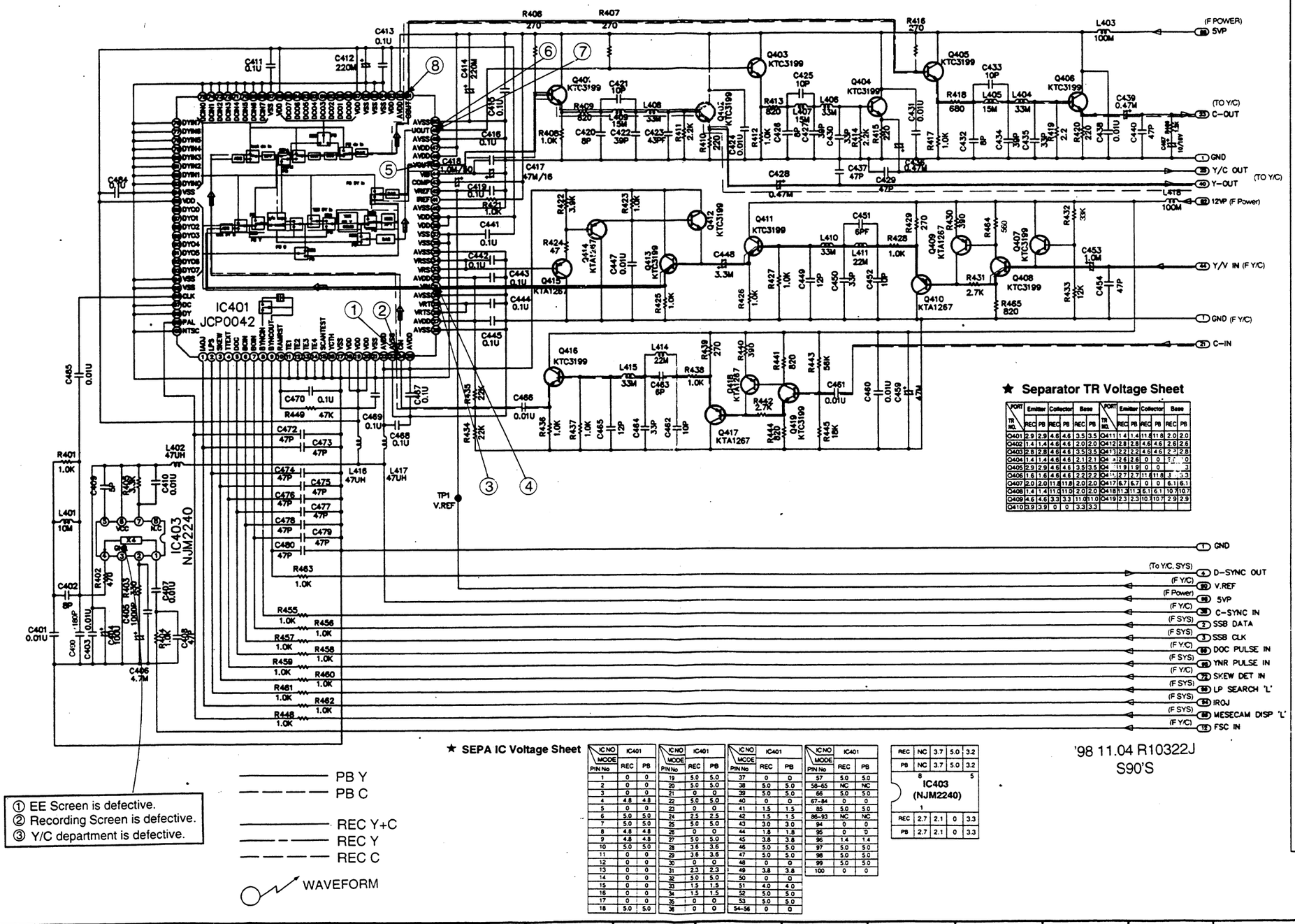
IC NO / MODE	IC301	
PIN No	REC	PB
41	4.1	4.1
42	5.0	5.0
43	3.3	3.3
44	2.1	2.5
45	0	0
46	2.3	2.3
47	0	0
48	0	0
49	1.6	0.5
50	2.3	2.3
51	2.8	2.8
52	0	0
53	3.0	3.0
54	2.1	2.4
55	2.9	2.9
56	0	0
57	2.2	2.2
58	1.5	1.5
59	0	1.1
60	2.5	3.1
61	0	1.1
62	2.2	0.5
63	2.2	0.5
64	0	0
65	5.0	5.0
66	0	0
67	0	0
68	1.6	1.6
69	0	0
70	3.2	3.3
71	5.0	5.0
72	0	0
73	1.1	1.1
74	3.1	3.1
75	2.8	2.8
76	2.9	2.9
77	2.8	2.8
78	5.0	5.0
79	2.0	2.0
80	2.0	5.0

LOCATION GUIDE

6. Separator Circuit Diagram

★ WAVEFORMS





① EE Screen is defective.
② Recording Screen is defective.
③ Y/C department is defective.

★ Separator TR Voltage Sheet

PORT / IC NO	Emitter REC	Emitter PB	Collector REC	Collector PB	Base REC	Base PB
Q401	2.9	2.9	4.6	4.6	3.5	3.5
Q402	1.4	1.4	4.6	4.6	2.0	2.0
Q403	2.8	2.8	4.6	4.6	3.5	3.5
Q404	1.4	1.4	4.6	4.6	2.1	2.1
Q405	2.9	2.9	4.6	4.6	3.5	3.5
Q406	1.6	1.6	4.6	4.6	2.2	2.2
Q407	2.0	2.0	11.8	11.8	2.0	2.0
Q408	1.4	1.4	11.0	11.0	2.0	2.0
Q409	4.6	4.6	3.3	3.3	11.0	11.0
Q410	3.9	3.9	0	0	3.3	3.3
Q411	1.4	1.4	11.8	11.8	2.0	2.0
Q412	2.8	2.8	4.6	4.6	2.6	2.6
Q413	2.2	2.2	4.6	4.6	2.8	2.8
Q414	2.6	2.6	0	0	0	0
Q415	1.9	1.9	0	0		3
Q416	2.7	2.7	11.8	11.8	3	3.3
Q417	6.7	6.7	0	0	6.1	6.1
Q418	11.3	11.3	6.1	6.1	10.7	10.7
Q419	2.3	2.3	10.7	10.7	2.9	2.9

★ SEPA IC Voltage Sheet

IC NO / MODE / PIN No	IC401 REC	IC401 PB
1	0	0
2	0	0
3	0	0
4	4.8	4.8
5	0	0
6	5.0	5.0
7	5.0	5.0
8	4.8	4.8
9	4.8	4.8
10	5.0	5.0
11	0	0
12	0	0
13	0	0
14	0	0
15	0	0
16	0	0
17	0	0
18	5.0	5.0
19	5.0	5.0
20	5.0	5.0
21	0	0
22	5.0	5.0
23	0	0
24	2.5	2.5
25	5.0	5.0
26	0	0
27	5.0	5.0
28	3.6	3.6
29	3.6	3.6
30	0	0
31	2.3	2.3
32	5.0	5.0
33	1.5	1.5
34	1.5	1.5
35	0	0
36	0	0
37	0	0
38	5.0	5.0
39	5.0	5.0
40	0	0
41	1.5	1.5
42	1.5	1.5
43	3.0	3.0
44	1.8	1.8
45	3.8	3.8
46	5.0	5.0
47	5.0	5.0
48	0	0
49	3.8	3.8
50	0	0
51	4.0	4.0
52	5.0	5.0
53	5.0	5.0
54-56	0	0
57	5.0	5.0
58-65	NC	NC
66	5.0	5.0
67-84	0	0
85	5.0	5.0
86-93	NC	NC
94	0	0
95	0	0
96	1.4	1.4
97	5.0	5.0
98	5.0	5.0
99	5.0	5.0
100	0	0

REC	NC	3.7	5.0	3.2
PB	NC	3.7	5.0	3.2

8 5
IC403 (NJM2240)
1

REC	2.7	2.1	0	3.3
PB	2.7	2.1	0	3.3

'98 11.04 R10322J
S90'S

LOCATION GUIDE

C401	B4	Q404	K10
C402	B4	Q405	L11
C403	B4	Q406	N10
C404	C4	Q407	M8
C405	C4	Q408	M8
C406	C3	Q409	L8
C407	C4	Q410	L8
C408	D4	Q411	J9
C409	C6	Q412	J9
C410	C6	Q413	I8
C411	D10	Q414	H8
C412	E11	Q415	H8
C413	F11	Q416	H7
C414	G10	Q417	J6
C415	G10	Q418	J7
C416	G10	Q419	K6
C417	H9	R401	B6
C418	G9	R402	C4
C419	G9	R403	C4
C420	H10	R404	C4
C421	I10	R405	C6
C422	I10	R406	H11
C423	I10	R407	H11
C424	J9	R408	H10
C425	K10	R409	H10
C426	K10	R410	J9
C427	K10	R411	I10
C428	J9	R412	J10
C429	L9	R413	J10
C430	K10	R414	K9
C431	L10	R415	L10
C432	M9	R416	L11
C433	M10	R417	L9
C434	M9	R418	L10
C435	M9	R419	N10
C436	L9	R420	N10
C437	K9	R421	G9
C438	N10	R422	H9
C439	N10	R423	I9
C440	O10	R424	H8
C441	G9	R425	I8
C442	G8	R426	J8
C443	G8	R427	J8
C444	G8	R428	L8
C445	G7	R429	L9
C447	I8	R430	M9
C448	J8	R431	M8
C449	K8	R432	N9
C450	K8	R433	N8
C451	K9	R434	G6
C452	L8	R435	G7
C453	N8	R436	H6
C454	N8	R437	H6
C459	L7	R438	I7
C460	L7	R439	J7
C461	K7	R440	J7
C462	I6	R441	J7
C463	I7	R442	J7
C464	I8	R443	K7
C465	H6	R444	J6
C466	G7	R445	K6
C467	F7	R448	E3
C468	F6	R449	E6
C469	F6	R455	E4
C470	E7	R456	E4
C472	E6	R457	E4
C473	E6	R458	E4
C474	E6	R459	E4
C475	E6	R460	E3
C476	E5	R461	E3
C477	E5	R462	E3
C478	E5	R463	E5
C479	E5	R464	M8
C480	E5	R465	M8
C484	C9	R466	O10
C485	B7	TP1	G5
C487	C9		
C490	B4		
IC401	D8		
IC403	D5		
L401	B5		
L402	C6		
L403	N11		
L404	M10		
L405	M10		
L406	K10		
L407	K10		
L408	I10		
L409	I10		
L410	K8		
L411	K8		
L414	I7		
L415	I7		
L416	F6		
L417	F6		
L418	O9		
Q401	H10		
Q402	J10		
Q403	J11		

7. Pre-Amp Circuit Diagram

★ Pre-Amp TR Voltage Sheet

PORT / TR NO.	Emitter REC	Emitter PB	Collector REC	Collector PB	Base REC	Base PB
Q001	0	0	0.7	0.7	0	0
Q002	0	0	0	0	0.7	0.7
Q003	0	0	0	0	4.9	3.5
Q601	9.1	0	11.8	11.8	9.8	0
Q602	0	0	0	10.7	4.9	0
Q603	0	0	9.8	11.9	0	0
Q604	7.0	7.0	11.8	11.8	7.6	7.6
Q605	11.8	11.8	7.6	7.6	11.2	11.2
Q606	4.8	4.8	11.2	11.2	5.4	5.4
Q607	0	0	0	0	4.9	4.9
Q608	0	0	0	0	4.9	4.9
Q609	4.2	4.2	11.8	11.8	1.0	1.0
Q610	4.2	4.2	11.8	11.8	4.8	4.8
Q611	0	0	0	0	4.4	4.4
Q612	0.8	0.8	5.2	5.2	1.3	1.3
Q613	0	0	0	0	0.7	0.7
Q614	1.8	1.8	5.2	5.2	2.4	2.4
Q615	0	0	5.2	5.2	1.2	1.2
Q616	2.8	2.8	11.8	11.8	3.4	3.4
Q617	4.8	4.8	11.2	11.2	5.4	5.4
Q618	0	0	0	0	4.5	4.5
Q619	0	0	4.4	4.4	0	0

★ Pre-Amp IC Voltage Sheet

IC601(HA118191ANT)

	1	5	10	15	20	25	30
PB	9.0	3.5	0.3	0.4	1.5	3.8	0	1.3	3.8	4.8	2.5	2.5	0	5.0	5.0
REC	0	0.3	1.8	1.9	1.5	3.8	0	3.1	3.8	4.8	2.5	2.5	0	5.0	5.0
PB	4.4	4.8	0	4.8	0.6	0	4.4	0	4.4	3.2	0	0	0	0	4.4
REC	2.0	0	0.5	0	0	0	0	0	2.1	0	0.6	0	0.6	0	2.1

REC is mute.

S-VHS/VHS record converting is defective.

PLAY BACK is mute.

IC601 HA118191ANT

IC002

TP602

TP601

(TO/FROM DECK)

P6D01	
GND	1
GND	2
CH 1(A-PB)	3
HI-FI REC	4
CH 2(A-PB)	5
SP CH 1(PB)	6
SP REC	7
SP CH 2(PB)	8
LP CH 1(PB)	9
LP REC	10
LP CH 2(PB)	11

P6M01	
REC C IN	1
H/S/A	2
C.RDY	3
D SYNC	4
H/SW 25	5
12W(P)	6
REC Y IN	7
GND	8
PB FM OUT	9
5.3V(P)	10
PB C	11
REC Y GAIN	12

P6M02	
VV"H"	1
REC C GAIN	2
LP"H"	3
V.DIV	4
SUPER DET"H"	5
A.H S/W	6
REC"H"	7
REC START "H"	8
REC AFM	9
GND	10
PB AFM	11
5.3V(P)	12

WAVEFORM

: PB Y+C
: PB Y
: PB C
: REC Y+C
: REC Y
: ERC C

'98 11 .04 R10326B
S90'S

★ WAVEFORMS

-PEC/REC-

P6M01 ① REC COLOR — REC 0.63 Vp-p, 20mV/20 μsec/DIV

P6M02 ② REC Y — REC 0.4 Vp-p, 10mV/5 msec/DIV

Q612 Emitter PB FM — PB 0.6 Vp-p, 20mV/5 msec DIV

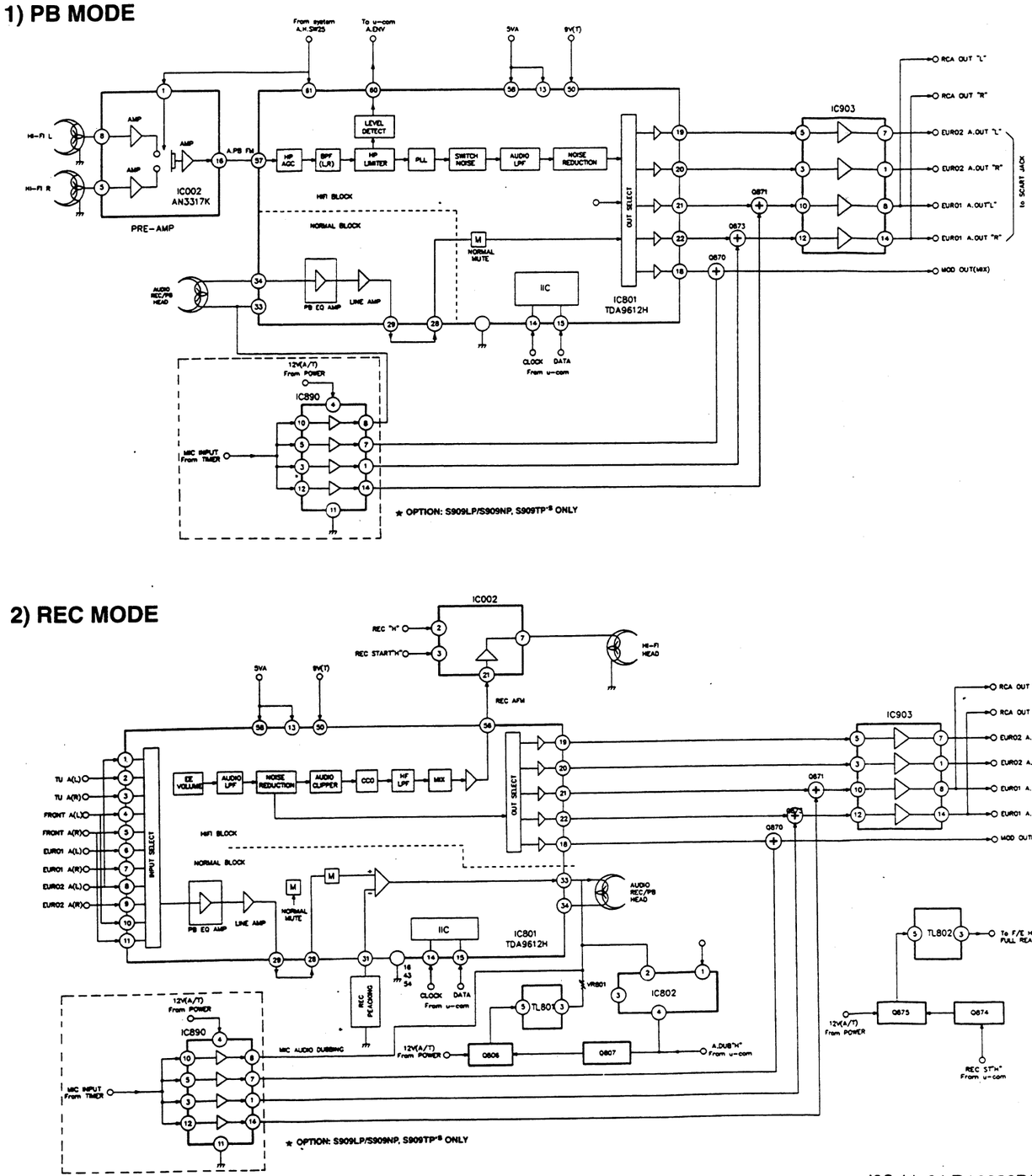
P6M01 ③ V.PB FM — PB 0.4 Vp-p, 20mV/5 msec/DIV

LOCATION GUIDE

C001	F5	Q602	G11
C002	G5	Q603	G10
C003	G5	Q604	H10
C004	H5	Q605	I10
C005	H5	Q606	J10
C006	H5	Q607	J9
C007	H5	Q608	L9
C008	F3	Q609	M10
C009	G3	Q610	M10
C010	G3	Q611	M8
C011	G3	Q612	I8
C012	G3	Q613	J7
C013	H4	Q614	K8
C014	H3	Q615	L8
C015	I4	Q616	M9
C016	F5	Q617	M8
C601	D9	Q618	L6
C602	D9	Q619	O4
C603	D9	R001	F5
C604	D9	R002	N5
C605	D8	R003	F5
C606	D8	R004	G5
C607	D8	R005	G5
C608	D7	R006	G5
C609	D7	R007	G5
C610	D7	R008	F3
C611	D7	R009	H3
C612	D6	R010	H4
C613	F6	R011	H4
C614	G6	R012	G3
C615	F6	R013	F5
C616	G6	R014	J4
C617	F7	R015	J4
C618	F8	R016	I4
C619	F8	R017	L5
C620	F8	R601	D9
C621	G9	R602	D9
C622	F9	R603	D8
C623	F9	R604	D8
C624	G10	R605	D8
C625	H10	R606	D7
C626	H10	R607	D6
C627	I10	R608	O8
C628	I10	R609	F8
C629	J10	R610	F8
C630	J10	R611	G8
C631	J10	R612	F9
C632	K10	R613	F9
C633	H9	R615	F11
C634	K10	R616	O10
C635	L10	R617	H9
C636	N10	R618	H10
C637	N10	R619	I9
C638	N10	R620	H9
C639	I7	R621	I10
C640	J8	R622	I10
C641	J8	R623	I10
C642	J8	R624	J10
C643	K7	R625	J10
C645	L8	R626	J10
C646	M8	R627	J10
C647	N8	R628	J10
C648	N8	R629	L10
C649	N8	R630	L10
C650	D6	R631	L10
D601	C8	R632	M10
D602	H7	R633	M9
D603	H9	R634	N10
D604	N6	R635	N10
D605	I7	R636	N10
D606	I6	R637	N10
D607	N6	R638	H7
IC002	F4	R639	I7
IC601	E10	R640	I7
L001	H5	R641	I7
L002	I4	R642	J7
L601	F10	R643	K8
L602	K10	R644	K7
L603	K10	R645	K7
L604	K8	R646	J8
L605	J7	R647	L7
L606	J7	R648	M8
L607	F6	R649	M8
L608	G6	R650	N9
L609	H10	R651	N9
L611	I9	R652	N8
L612	O9	R653	N8
L613	D7	R654	O8
L614	D9	R655	M8
L615	D6	R658	L5
P6D01	A6	R659	K6
P6M01	P8	TP601	D6
P6M02	P6	TP602	I8
Q001	J4	ZD601	F10
Q002	J4		
Q003	M5		
Q601	F11		

8. Hi-Fi Block Diagram

1) PB MODE



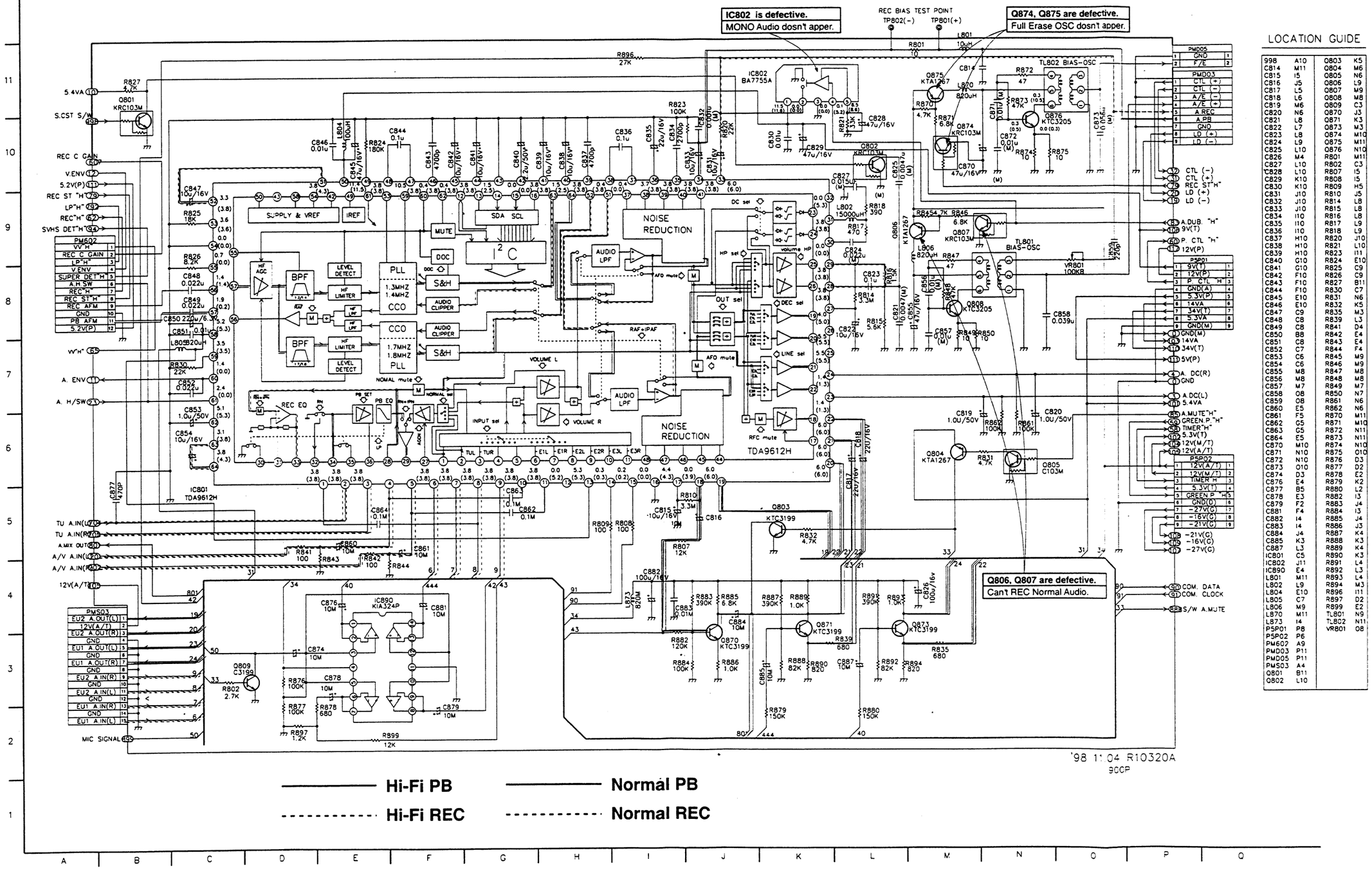
2) REC MODE

'98 11 .04 R10320BC

★ Hi-Fi TR Voltage Sheet

Port / TR No.	Emitter (REC)	Base (REC)	Collector (REC)
Q801	0.0(0.0)	4.2(4.2)	0.0(0.0)
Q802	0.0(0.0)	0.0(0.0)	0.0(0.0)
Q803	0.0(0.0)	0.7(0.7)	0.0(0.0)
Q804	5.1(5.1)	4.4(4.4)	5.1(5.1)
Q805	0.0(0.0)	5.0(5.0)	0.0(0.0)
Q806	12.0(12.0)	12.0(11.2)	0.0(12.0)
Q807	0.0(0)	0.0(5.0)	12.0(0)
Q808	0.0(0.2)	0.0(0.2)	0.0(10.8)
Q809	0.0(0.0)	0.7(0.7)	0.0(0.0)
Q870	0.9(0.9)	1.4(1.4)	6.0(6.0)
Q871	1.3(1.3)	1.9(1.9)	10.2(10.2)
Q873	1.3(1.3)	10.2(10.2)	10.2(10.2)
Q874	0.0(0.0)	0.0(5.0)	12.0(0.0)
Q875	12.0(12.0)	12.0(11.2)	0(12.0)
Q876	0.0(0.2)	0.0(0.2)	0.0(10.8)

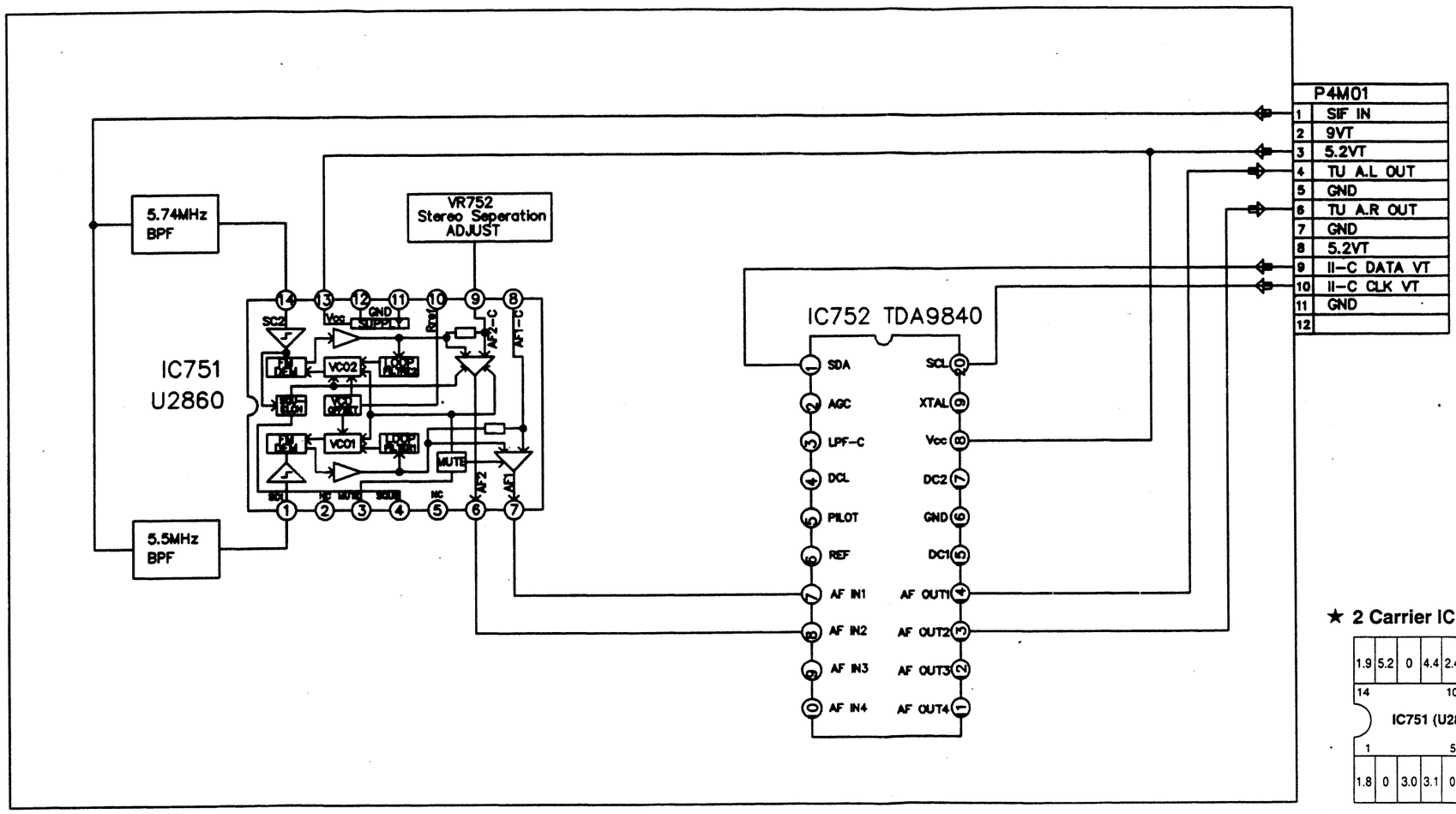
8. Hi-Fi Circuit Diagram



LOCATION GUIDE

998	A10	Q803	K5
C814	M11	Q804	M6
C815	I5	Q805	N6
C816	J5	Q806	L9
C817	L5	Q807	M9
C818	L6	Q808	M8
C819	M6	Q809	C3
C820	N6	Q870	J3
C821	L8	Q871	K3
C822	L7	Q873	M3
C823	L8	Q874	M10
C824	L9	Q875	M11
C825	L10	Q876	N10
C826	M4	R801	M11
C827	L10	R802	C3
C828	L10	R807	I5
C829	K10	R808	J5
C830	K10	R809	H5
C831	J10	R810	J5
C832	J10	R814	L8
C833	J10	R815	L8
C834	I10	R816	L8
C835	I10	R817	L9
C836	I10	R818	L9
C837	H10	R820	J10
C838	H10	R821	L10
C839	H10	R823	I11
C840	G10	R824	E10
C841	G10	R825	C9
C842	F10	R826	C9
C843	F10	R827	B11
C844	F10	R830	C7
C845	E10	R831	N6
C846	E10	R832	K5
C847	C9	R835	M3
C848	C8	R839	L3
C849	C8	R841	D4
C850	B8	R842	E4
C851	C8	R843	E4
C852	C7	R844	F4
C853	C6	R845	M9
C854	C6	R846	M9
C855	M8	R847	M8
C856	M8	R848	M8
C857	M7	R849	M7
C858	O8	R850	N7
C859	O8	R861	N6
C860	F5	R862	N6
C861	F5	R870	M11
C862	G5	R871	M10
C863	G5	R872	N11
C864	E5	R873	N11
C870	M10	R874	N10
C871	N10	R875	O10
C872	N10	R876	D3
C873	O10	R877	D2
C874	D3	R878	E2
C876	E4	R879	K2
C877	B5	R880	L2
C878	E3	R882	I3
C879	F2	R883	J4
C881	F4	R884	I3
C882	I4	R885	J4
C883	I4	R886	J3
C884	J4	R887	K4
C885	K3	R888	K3
C887	L3	R889	K4
IC801	C5	R890	K3
IC802	J11	R891	L4
IC890	E4	R892	L3
L801	M11	R893	L4
L802	L9	R894	M3
L804	E10	R896	I11
L805	C7	R897	D2
L806	M9	R899	E2
L870	M11	TL801	N9
L873	I4	TL802	N11
P5P01	P8	VR801	O8
P5P02	P6		
PM602	A9		
PMD03	P11		
PMD05	P11		
PMS03	A4		
Q801	B11		
Q802	L10		

9. 2 Carrier Block Diagram



'98 11 .04 R10324BA

★ 2 Carrier IC Voltage Sheet

1.9	5.2	0	4.4	2.4	2.3	2.2
14				10	9	

IC751 (U2860)

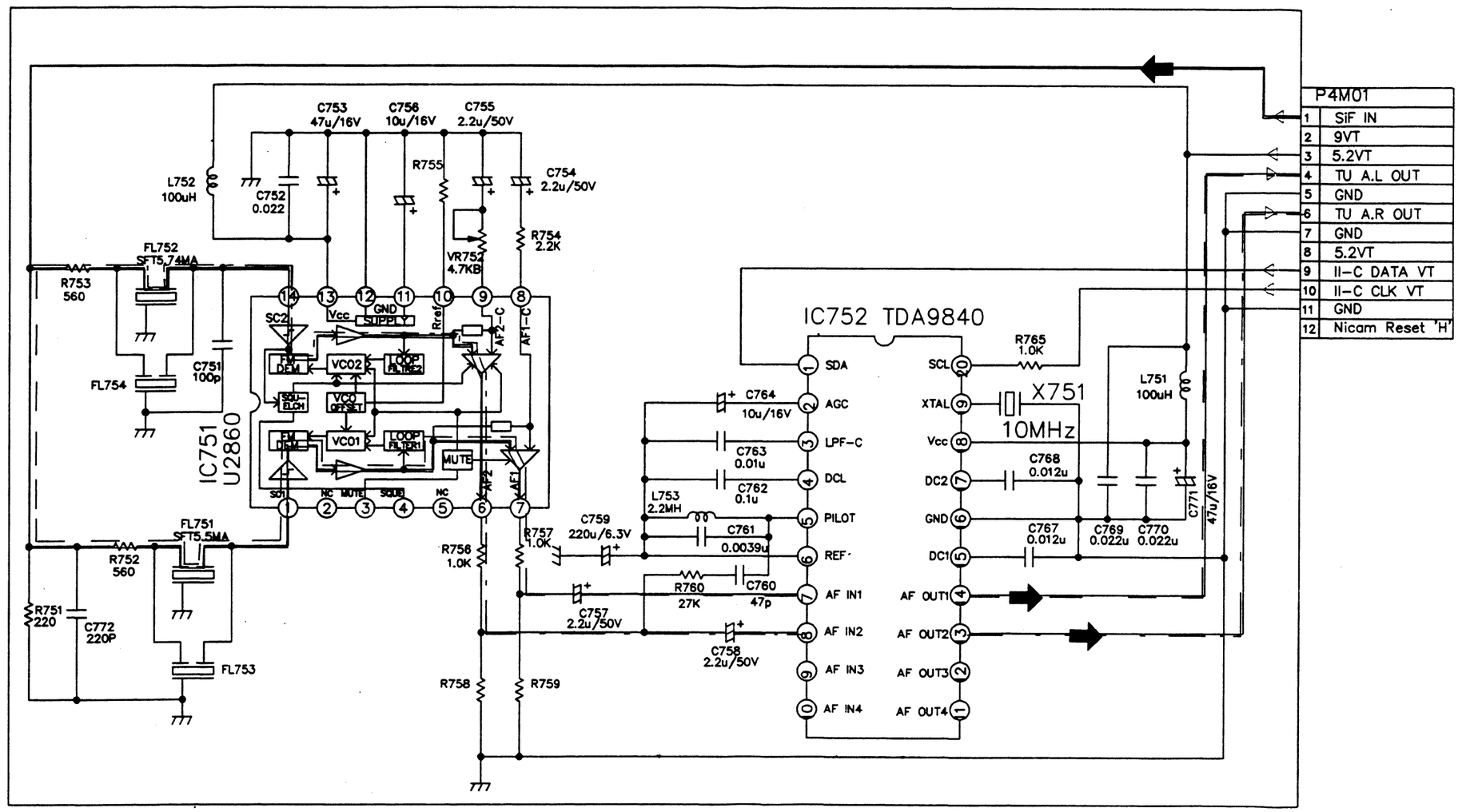
1				5		
1.8	0	3.0	3.1	0	2.5	2.4

2.5	3.4	5.2	2.7	0	2.7	2.7	2.7	2.7	2.7
20				15					

IC752 (TDA9840)

1				5					10
2.5	3.6	2.8	2.6	2.6	2.6	2.6	2.6	2.6	2.6

9. 2 Carrier Circuit Diagram



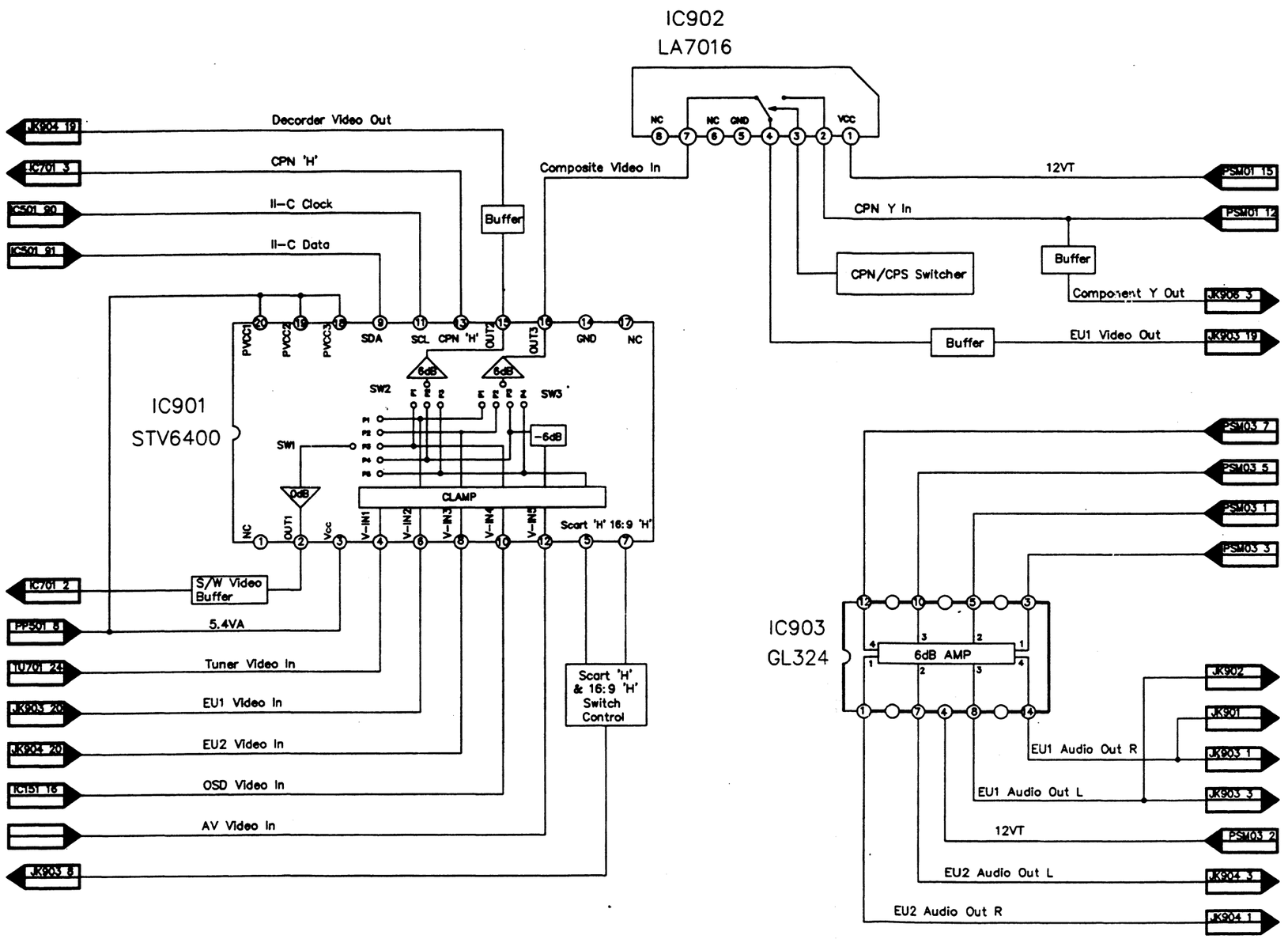
LOCATION GUIDE

C751	B4
C752	B5
C753	C5
C754	D5
C755	C5
C756	C5
C757	D3
C758	E2
C759	D3
C760	E3
C761	E3
C762	E3
C763	E3
C764	E4
C767	F3
C768	F3
C769	G3
C770	G3
C771	G3
C772	A3
FL751	B3
FL752	B4
FL753	B2
FL754	A4
IC751	B3
IC752	E4
L751	G4
L752	B5
L753	D3
P4M01	H5
R751	A3
R752	B3
R753	A4
R754	D5
R755	C5
R756	C3
R757	D3
R758	C2
R759	D2
R760	D3
R765	F4
VR752	C4
X751	F4

——————— : TU AUDIO
— — — — — — — : TU A.L
——— — — — : TU A.R

'98 11 .04 R10324A
S904P

10. Premiere & Scart Block Diagram



'98 11 .04 R10327BA
S900'S

★ Premiere & Scart IC Voltage Sheet

IC901 (STV6400)

0	1	20	5.08
1.17			5.08
4.99			5.08
1.81			0
2.52	5		1.62
1.42		15	1.62
0.022			0
1.42			5.03
4.3	10		1.42
2.2			4.66

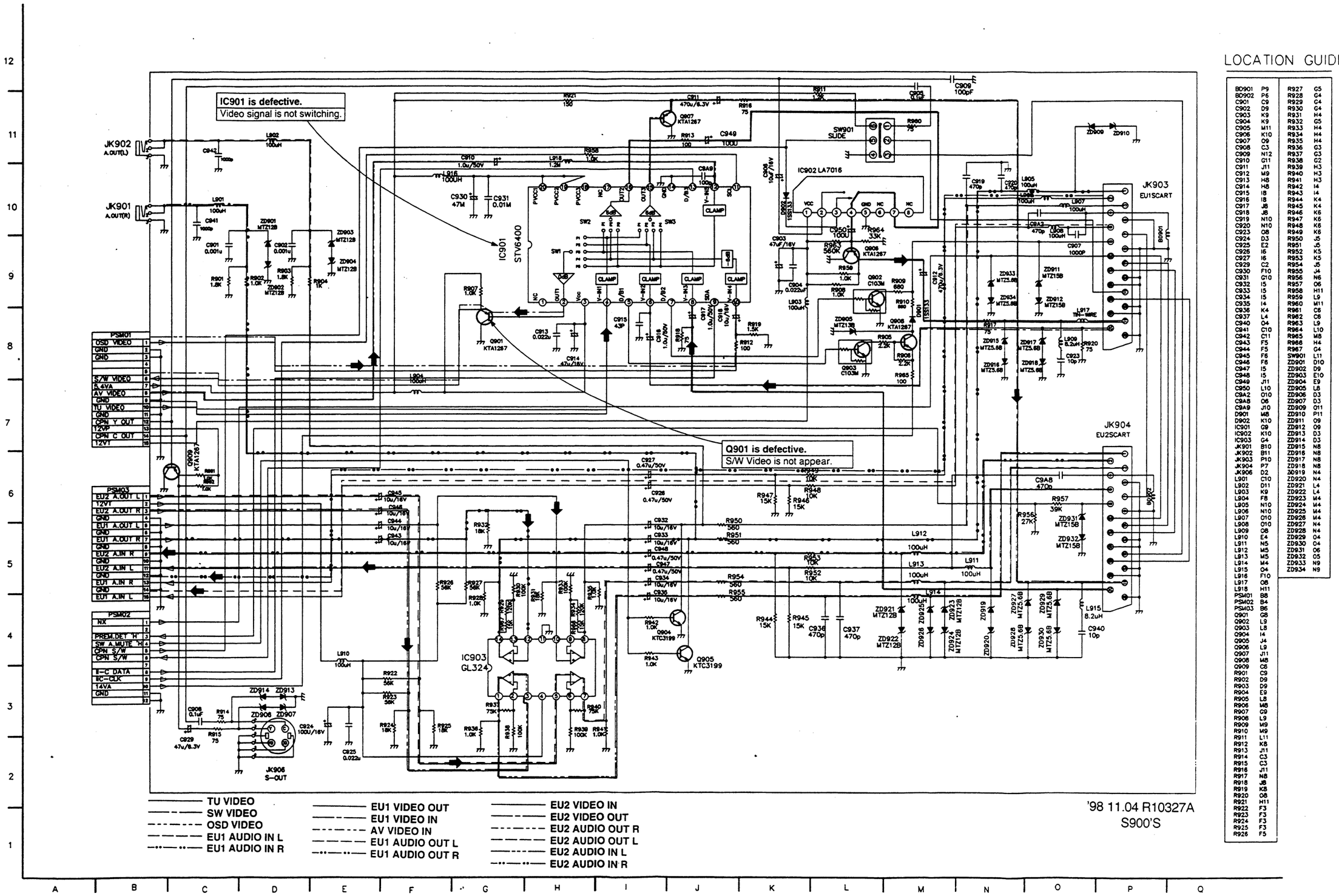
IC903 (KA324)

5.76	1		6.83
2.9			2.88
2.9			2.8
11.84			0
2.89	5	10	2.9
2.9			2.9
5.78			6.85

★ Premiere & Scart TR Voltage Sheet

Port / TR No.	Emitter	Base	Collector
Q901	1.3	1.2	0
Q902	0	0	11.8
Q903	0	2.6	0
Q904	0	0	0.2
Q905	0	0	0.2
Q906	3.6	3.0	0
Q907	2.2	1.6	0
Q908	11.8	11.0	11.7
Q909	2.6	2.0	0

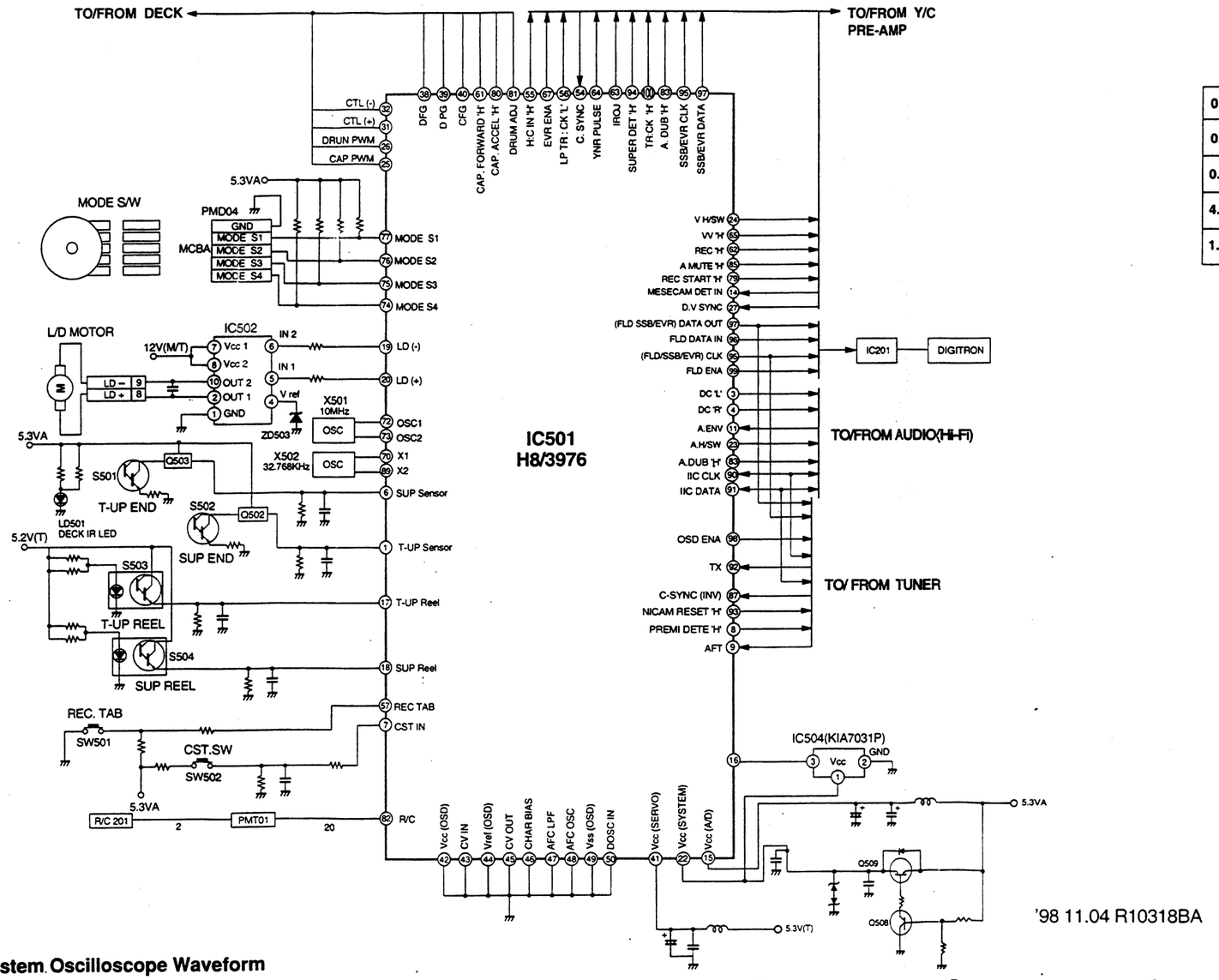
10. Premiere & Scart Circuit Diagram



LOCATION GUIDE

BD901	P9	R927	G5
BD902	P6	R928	G4
C901	D9	R929	G4
C902	D9	R930	G4
C903	K9	R931	H4
C904	K9	R932	G5
C905	M11	R933	H4
C906	K10	R934	H4
C907	D9	R935	H4
C908	C3	R936	G3
C909	N12	R937	G3
C910	G11	R938	G2
C911	J11	R939	H3
C912	M9	R940	H3
C913	K8	R941	H3
C914	H5	R942	I4
C915	I8	R943	I4
C916	I8	R944	K4
C917	J8	R945	K4
C918	J8	R946	K6
C919	N10	R947	K6
C920	N10	R948	K6
C923	O8	R949	K6
C924	D3	R950	J5
C925	E2	R951	J6
C926	I6	R952	K5
C927	I6	R953	K5
C928	C2	R954	L5
C930	F10	R955	K4
C931	G10	R956	N6
C932	I5	R957	O6
C933	I5	R958	H11
C934	I5	R959	L9
C935	I4	R960	M11
C936	K4	R961	C6
C937	L4	R962	C6
C940	O4	R963	L9
C941	C10	R964	L10
C942	C11	R965	M8
C943	F5	R966	H4
C944	F5	R967	O4
C945	F6	SW901	L11
C946	F6	ZD901	D10
C947	I5	ZD902	D9
C948	I5	ZD903	E9
C949	J11	ZD904	E9
C950	L10	ZD905	L6
C9A2	O10	ZD906	D3
C9A8	O6	ZD907	D3
C9A9	J10	ZD909	O11
D901	M8	ZD910	P11
D902	K10	ZD911	O9
IC901	G9	ZD912	O9
IC902	K10	ZD913	D3
IC903	G4	ZD914	D3
JK901	B10	ZD915	N8
JK902	B11	ZD916	N8
JK903	P10	ZD917	N8
JK904	P7	ZD918	N8
JK906	D2	ZD919	N4
L901	C10	ZD920	N4
L902	D11	ZD921	L4
L903	K6	ZD922	L4
L904	F8	ZD923	M4
L905	N10	ZD924	M4
L906	N10	ZD925	M4
L907	O10	ZD926	M4
L908	O10	ZD927	N4
L909	O8	ZD928	N4
L910	E4	ZD929	O4
L911	N5	ZD930	O4
L912	M5	ZD931	O6
L913	M5	ZD932	O5
L914	M4	ZD933	N9
L915	O4	ZD934	N9
L916	F10		
L917	O8		
L918	H11		
PSM01	B8		
PSM02	B4		
PSM03	B6		
Q901	G8		
Q902	L9		
Q903	L8		
Q904	J4		
Q905	J4		
Q906	L9		
Q907	J11		
Q908	M8		
Q909	O8		
R901	C9		
R902	D9		
R903	D9		
R904	E9		
R905	L5		
R906	M5		
R907	G9		
R908	L9		
R909	M9		
R910	M9		
R911	L11		
R912	K8		
R913	J11		
R914	C3		
R915	C3		
R916	J11		
R917	N8		
R918	J8		
R919	K8		
R920	O8		
R921	H11		
R922	F3		
R923	F3		
R924	F3		
R925	F3		
R926	F5		

11. System Block Diagram



'98 11.04 R10318BA

★ IC Voltage Sheet

IC502 (KA3082)

REC (PB)

0.0(0.0)	1	10	0.5(0.5)
0.5(0.5)			0.7(0.7)
0.7(0.7)			12.6(12.5)
4.4(2.3)			12.6(12.5)
1.8(1.8)	5		1.8(1.8)

IC505 (KIA7042P)

REC (PB)

1		3
5.3 (5.3)	0.0 (0.0)	4.9 (4.9)

IC504 (KIA7031P)

REC (PB)

1		3
5.2 (5.23)	0.0 (0.0)	5.1 (5.1)

● IC501

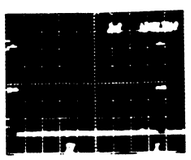
IC NO / MODE / PIN NO	REC	PB
1	0.4	0.4
2	0.0	0.0
3	3.0	3.0
4	2.8	3.0
5	5.1	5.1
6	0.5	0.6
7	1.1	1.4
8	0.0	0.0
9	3.1	3.3
10	3.3	3.3
11	1.8	1.4
12	2.3	3.5
13	5.2	5.2
14	0.0	0.0
15	5.3	5.3
16	5.1	5.1
17	→	pulse
18	→	pulse
19	2.7	5.2
20	5.2	5.2
21	0.0	0.0
22	5.2	5.2
23	→	pulse
24	→	pulse
25	→	pulse
26	→	pulse
27	→	pulse
28	0.0	0.0
29	0.0	0.0
30	0.0	0.0
31	2.8	2.8
32	2.3	2.3
33	0.0	0.0
34	2.7	3.5
35	2.3	2.4
36	2.3	2.3
37	2.3	2.3
38	→	pulse
39	→	pulse
40	→	pulse
41	0.0	0.0
42	0.0	0.0
43	0.0	0.0
44	0.0	0.0
45	0.0	0.0
46	0.0	0.0
47	0.0	0.0
48	0.0	0.0
49	0.0	0.0
50	0.0	0.0

IC NO / MODE / PIN NO	REC	PB
51	0.0	0.0
52	0.0	0.0
53	0.0	0.0
54	0.0	0.4
55	0.0	0.0
56	0.0	0.0
57	5.0	3.4
58	2.1	5.2
59	0.0	0.5
60	0.0	5.1
61	0.0	5.2
62	5.2	0.0
63	0.0	0.0
64	pulse	pulse
65	2.2	5.2
66	4.2	4.2
67	pulse	pulse
68	0.0	0.0
69	1.5	1.5
70	0.9	0.9
71	0.0	0.0
72	2.5	2.5
73	2.3	2.5
74	1.6	4.9
75	1.7	0.0
76	1.7	4.9
77	1.9	4.9
78	3.1	3.1
79	5.2	0.0
80	2.7	2.7
81	1.2	1.3
82	→	pulse
83	0.0	0.0
84	0.0	0.0
85	0.0	0.0
86	→	pulse
87	→	pulse
88	5.1	5.1
89	2.5	3.0
90	→	pulse
91	→	pulse
92	→	pulse
93	→	pulse
94	0.0	0.0
95	→	pulse
96	→	pulse
97	→	pulse
98	→	pulse
99	→	pulse
100	0.0	0.0

★ System Oscilloscope Waveform

① 

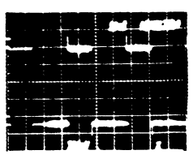
IC501 Pin 24
100mV/5ms
REC/PB
(V.H/SW)

② 

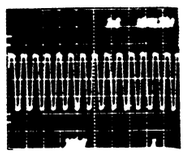
IC501 Pin 27
1V/2mS
QUE/REV
(D.V-SYNC)

③ 

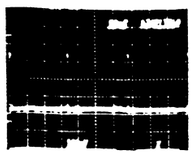
IC501 Pin 31
100mV/10mS
PB
(CTL+)

④ 

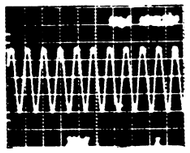
IC501 Pin 32
100mV/10mS
(CTL-)

⑤ 

IC501 Pin 38
100mV/2mS
REC/PB
(DFG)

⑥ 

IC501 Pin 39
100mV/10μS
REC/PB
(DPG)

⑦ 

IC501 Pin 40
100mV/500μS
REC/PB
(CFG)

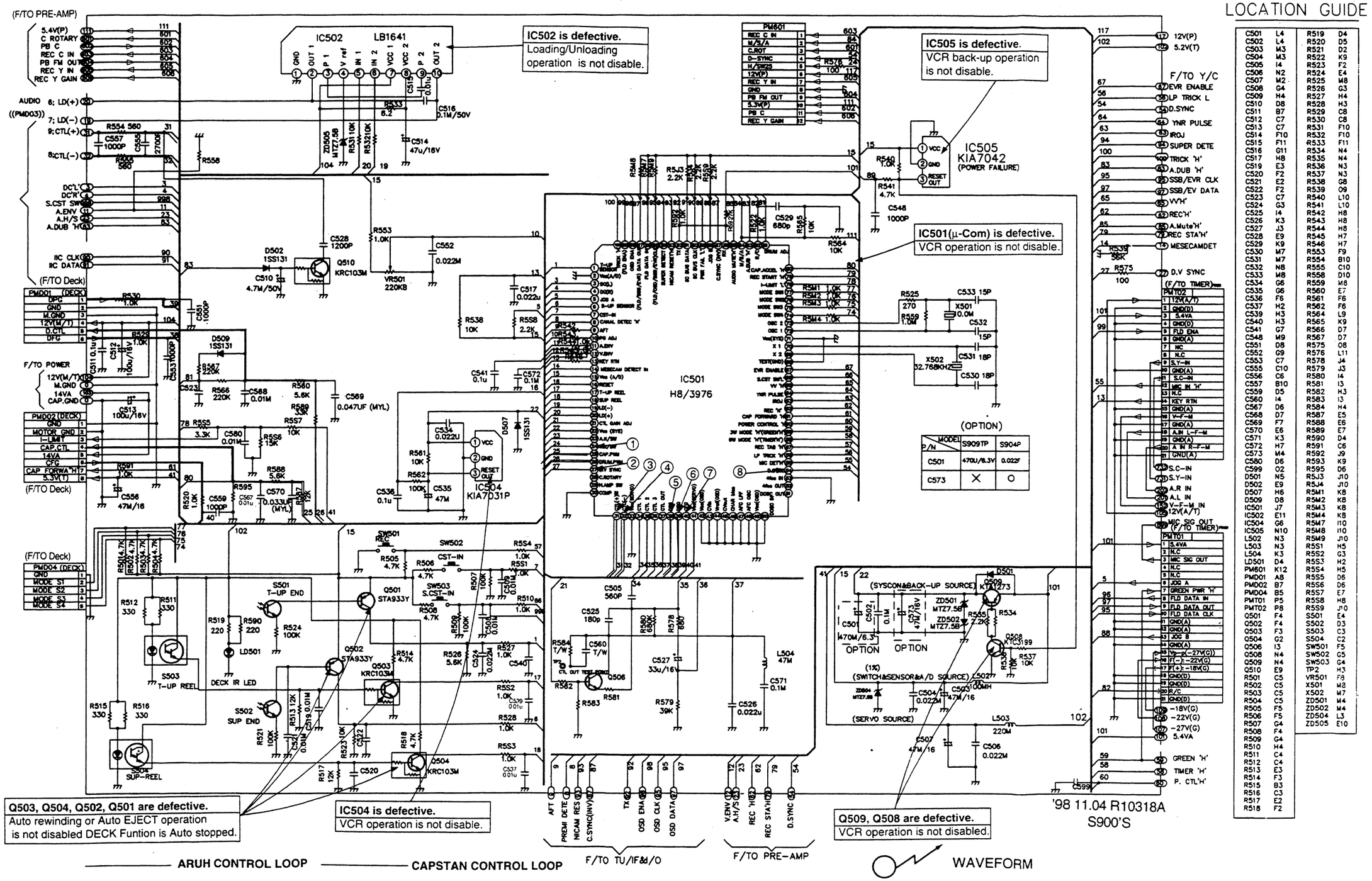
⑧ 

IC501 Pin 54
1V/50μS
REC/PB
(C-SYNC NRMAC)

★ TR Voltage Sheet

TR NO. / Port	Emitter PB	Emitter REC	Collector PB	Collector REC	Base PB	Base REC
Q501	5.3	5.3	0.2	0.3	4.8	4.8
Q502	5.3	5.3	0.1	0.5	4.7	4.7
Q503	0.0	0.0	pulse	pulse	pulse	pulse
Q504	0.0	0.0	pulse	pulse	pulse	pulse
Q508	0.0	0.0	0.0	0.0	0.7	0.7
Q509	5.3	5.3	5.3	5.3	4.6	4.5

11. System Circuit Diagram

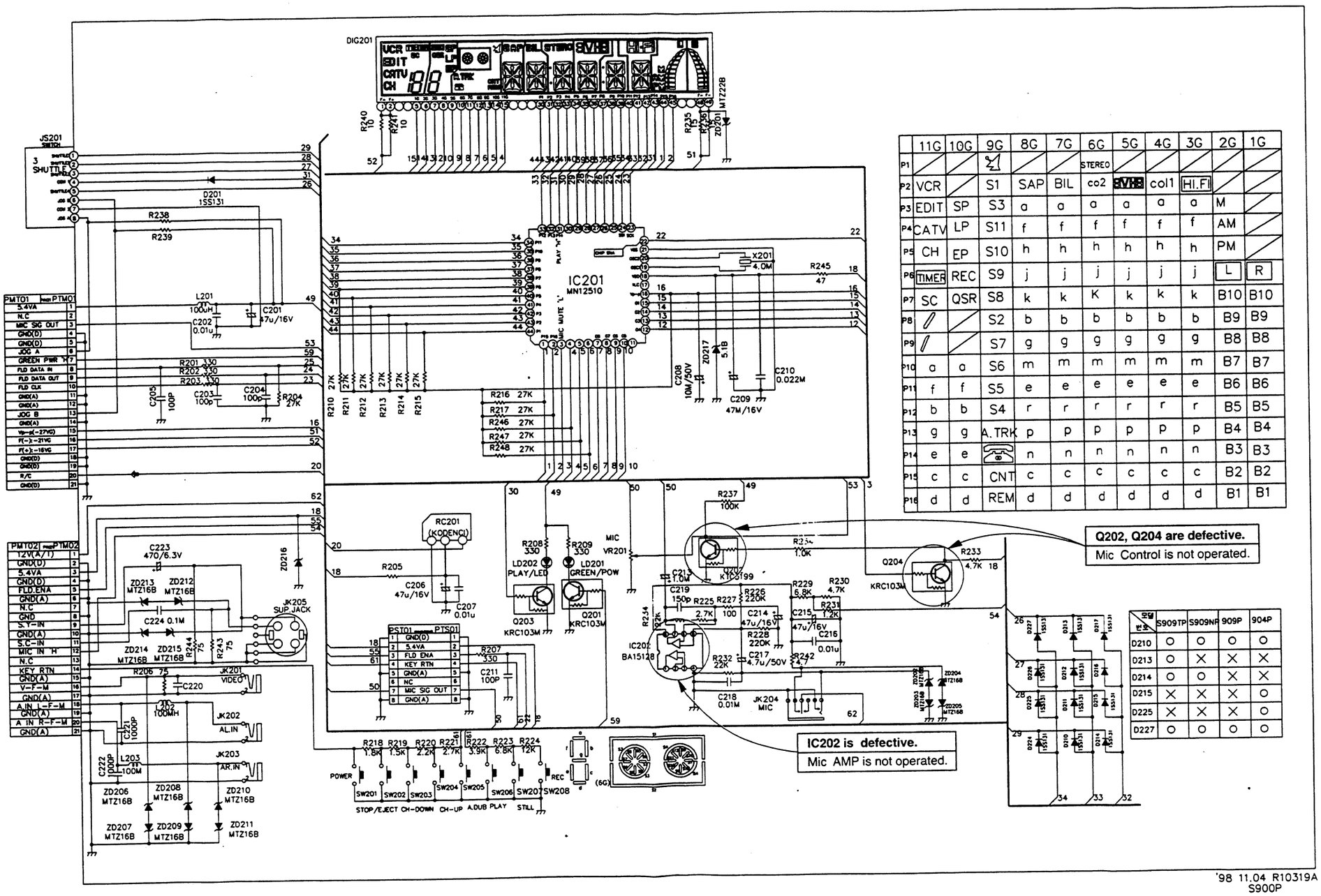


LOCATION GUIDE

C501	L4	R519	D4
C502	L4	R520	D5
C503	M3	R521	D2
C504	M3	R522	K9
C505	I4	R523	F2
C506	N2	R524	E4
C507	M2	R525	M8
C508	G4	R526	G3
C509	H4	R527	H4
C510	D8	R528	H3
C511	B7	R529	C8
C512	C7	R530	C8
C513	C7	R531	F10
C514	F10	R532	F10
C515	F11	R533	F11
C516	G11	R534	N4
C517	H8	R535	N4
C519	E3	R536	N3
C520	F2	R537	N3
C521	E2	R538	G8
C522	F2	R539	O9
C523	C7	R540	L10
C524	G3	R541	L10
C525	I4	R542	H8
C526	K3	R543	H8
C527	J3	R544	H8
C528	E9	R545	H7
C529	K9	R546	H7
C530	M7	R553	F9
C531	M7	R554	B10
C532	N8	R555	O10
C533	M8	R558	D10
C534	G6	R559	M8
C535	G6	R560	E7
C536	F6	R561	F6
C537	H2	R562	F6
C539	H3	R564	L9
C540	H3	R565	K9
C541	G7	R566	D7
C548	M9	R567	D7
C551	D8	R575	O8
C552	G9	R576	L11
C553	C7	R578	J4
C555	C10	R579	J3
C556	C6	R580	I4
C557	B10	R581	I3
C559	D5	R582	H3
C560	I4	R583	I3
C567	D6	R584	H4
C568	D7	R587	E5
C569	F7	R588	E6
C570	E6	R589	E7
C571	K3	R590	D4
C572	H7	R591	C6
C573	M4	R592	J9
C580	D6	R593	K9
C599	O2	R595	D6
D501	N5	R5J3	J10
D502	E9	R5J4	J10
D507	H6	R5M1	K8
D509	D8	R5M2	K8
IC501	J7	R5M3	K8
IC502	E11	R5M4	K8
IC504	G6	R5M7	I10
IC505	N10	R5M8	I10
L502	N3	R5M9	J10
L503	N3	R5S1	H5
L504	K3	R5S2	G3
LD501	D4	R5S3	H2
PM601	K12	R5S4	H5
PMD01	A8	R5S5	D6
PMD02	B7	R5S6	D6
PMD04	B5	R5S7	E7
PMT01	P5	R5S8	H8
PMT02	P8	R5S9	J10
Q501	F4	S501	E4
Q502	F4	S502	D3
Q503	F3	S503	C3
Q504	G2	S504	C2
Q505	I3	SW501	F5
Q508	N4	SW502	G5
Q509	N4	SW503	G4
Q510	E9	TP2	H3
R501	C5	VR501	F8
R502	C5	X501	M8
R503	C5	X502	M7
R504	C5	ZD501	M4
R505	F5	ZD502	M4
R506	F5	ZD504	L3
R507	G4	ZD505	E10
R508	F4		
R509	G4		
R510	H4		
R511	C4		
R512	C4		
R513	E3		
R514	F3		
R515	B3		
R516	C3		
R517	E2		
R518	F2		

P/N \ MODEL	S909TP	S904P
C501	470U/6.3V	0.022F
C573	X	O

12. Timer Circuit Diagram



	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G
P1						STEREO					
P2	VCR		S1	SAP	BIL	co2	SVHS	col1	HI.FI		
P3	EDIT	SP	S3	a	a	a	a	a	a	M	
P4	CATV	LP	S11	f	f	f	f	f	f	AM	
P5	CH	EP	S10	h	h	h	h	h	h	PM	
P6	TIMER	REC	S9	j	j	j	j	j	j	L	R
P7	SC	QSR	S8	k	k	K	k	k	k	B10	B10
P8			S2	b	b	b	b	b	b	B9	B9
P9			S7	g	g	g	g	g	g	B8	B8
P10	a	a	S6	m	m	m	m	m	m	B7	B7
P11	f	f	S5	e	e	e	e	e	e	B6	B6
P12	b	b	S4	r	r	r	r	r	r	B5	B5
P13	g	g	A.TRK	p	p	p	p	p	p	B4	B4
P14	e	e		n	n	n	n	n	n	B3	B3
P15	c	c	CNT	c	c	c	c	c	c	B2	B2
P16	d	d	REM	d	d	d	d	d	d	B1	B1

	S909TP	S909NP	909P	904P
D210	O	O	O	O
D213	O	X	X	X
D214	O	O	X	X
D215	X	X	X	O
D225	X	X	X	O
D227	O	O	O	O

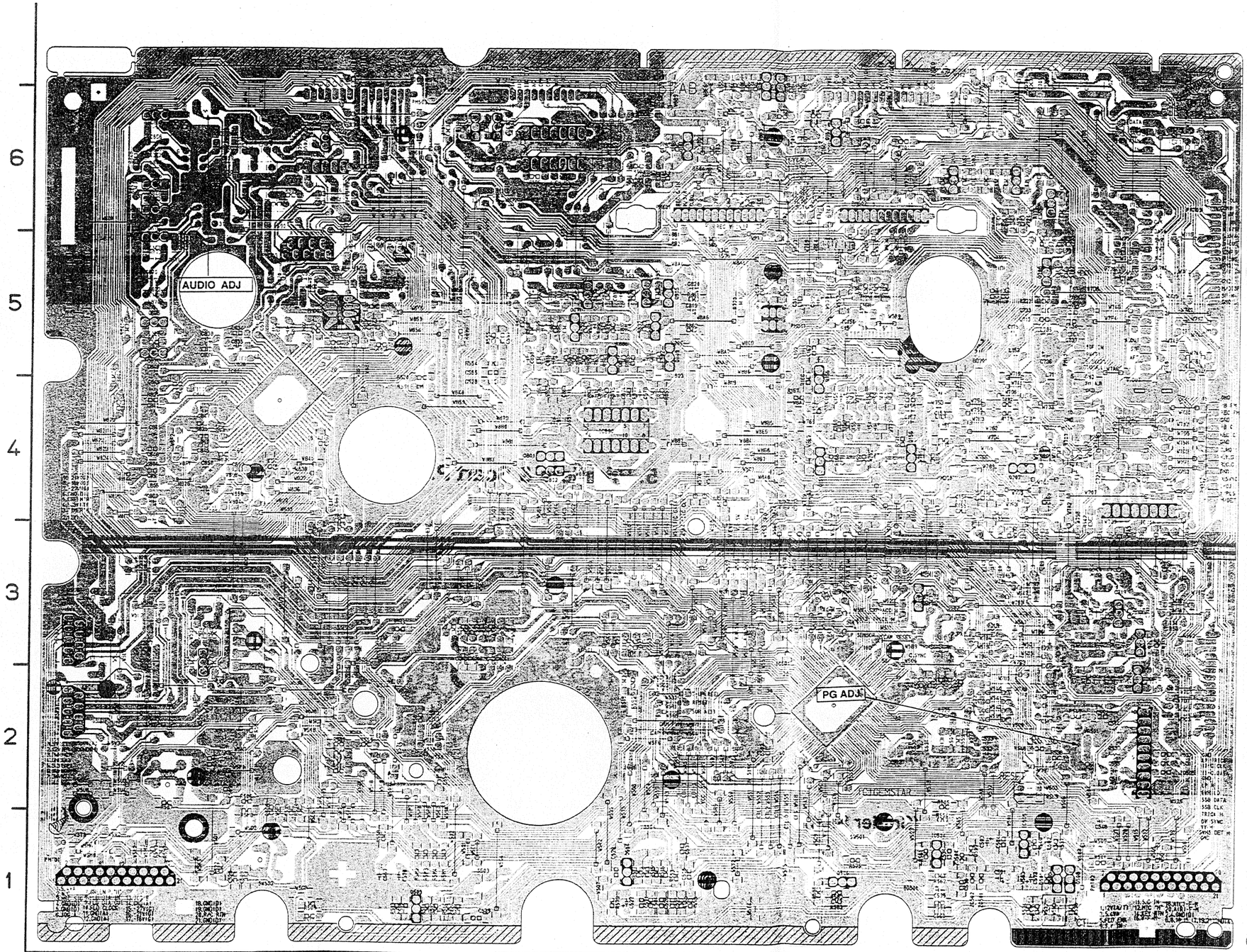
LOCATION GUIDE

C201	E8	R221	G3
C202	D8	R222	G3
C203	D7	R223	G3
C204	E7	R224	H3
C205	D7	R225	J5
C206	F5	R226	J5
C207	G5	R227	J5
C208	J7	R228	J4
C209	J7	R229	K5
C210	K7	R230	K5
C211	G4	R231	K5
C213	I5	R232	J4
C214	J5	R233	M5
C215	K5	R234	I5
C216	K4	R235	J10
C217	J4	R236	J10
C218	J4	R237	J6
C219	I5	R238	D9
C220	D4	R239	D9
C221	C3	R240	F10
C222	C3	R241	F10
C223	D5	R242	K4
C224	C5	R243	D4
D201	D9	R244	D4
D210	N3	R245	K9
D211	N4	R246	G7
D212	N4	R247	G7
D213	N4	R248	G7
D214	N3	R254	K5
D215	N4	RC201	G6
D216	N4	SW201	F3
D217	N4	SW202	F3
D224	N3	SW203	F3
D225	N4	SW204	G3
D226	N4	SW205	G3
D227	N4	SW206	G3
DIG201	F11	SW207	H3
IC201	H8	SW208	H3
IC202	I4	VR201	I5
JK201	D4	X201	J9
JK202	D4	ZD201	J10
JK203	D3	ZD202	L4
JK204	J4	ZD203	L4
JK205	E5	ZD204	M4
JS201	B10	ZD205	M4
L201	D8	ZD206	C3
L202	D4	ZD207	C2
L203	C3	ZD208	D3
LD201	H5	ZD209	D2
LD202	H5	ZD210	D3
PST01	F5	ZD211	D2
PTM01	B8	ZD212	D5
PTM02	B6	ZD213	C5
PTS01	G5	ZD214	C4
Q201	H5	ZD215	D4
Q202	J5	ZD216	E5
Q203	H5	ZD217	J8
Q204	L5		
R201	D8		
R202	D7		
R203	D7		
R204	E7		
R205	F5		
R206	C4		
R207	G4		
R208	H5		
R209	H5		
R210	F7		
R211	F7		
R212	F7		
R213	F7		
R214	F7		
R215	G7		
R216	G7		
R217	G7		
R218	F3		
R219	F3		
R220	G3		

'98 11.04 R10319A
S900P

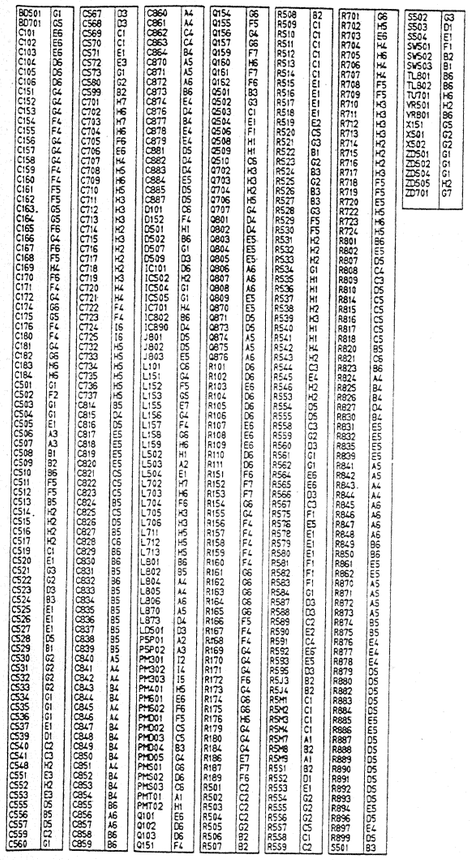
PRINTED CIRCUIT BOARD DIAGRAMS

1. Main P.C.Board



(Solder Side)

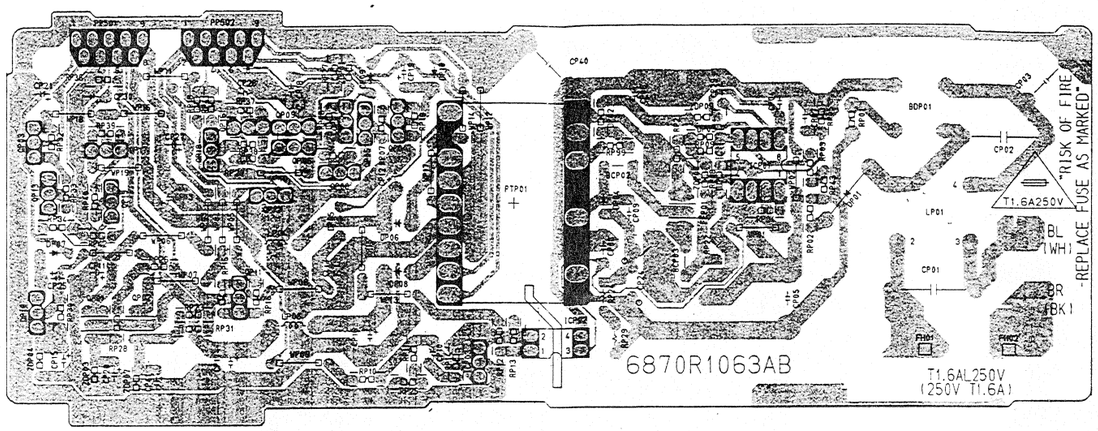
LOCATION GUIDE



ABBREVIATIONS
· PG : Pluse Generator
· ADJ : Adjustment

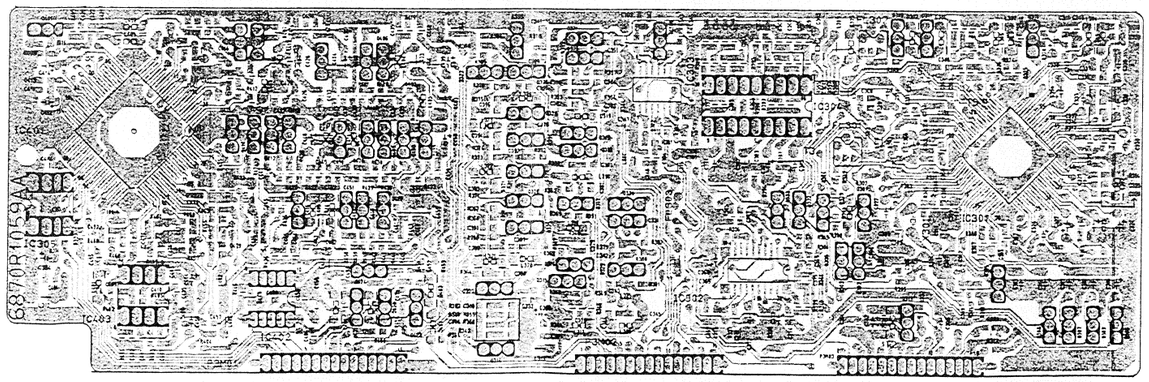
NOTE: ● : Measurement Point
□ : Adjustment Point
Emitter: TRANSISTOR
Collector
Base

2. Power (SMPS) P.C.Board



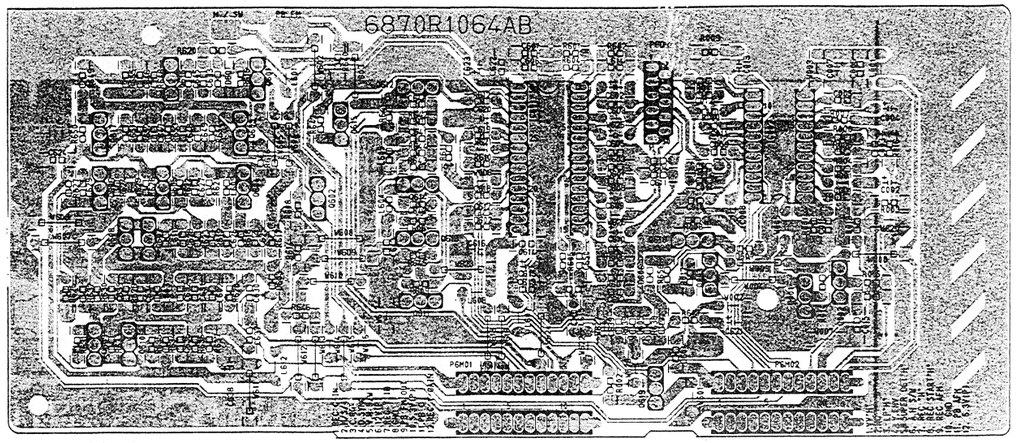
(Solder Side)

3. Y/C P.C.Board



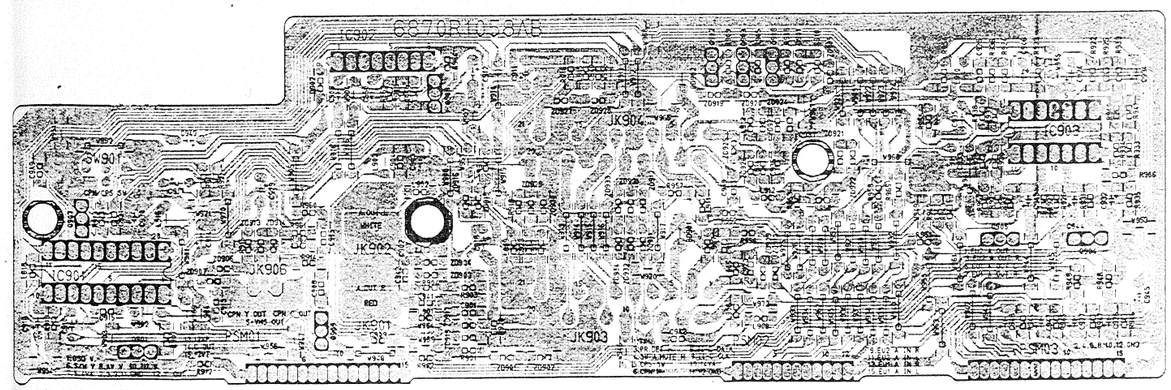
(Solder Side)

4. Pre-Amp P.C.Board



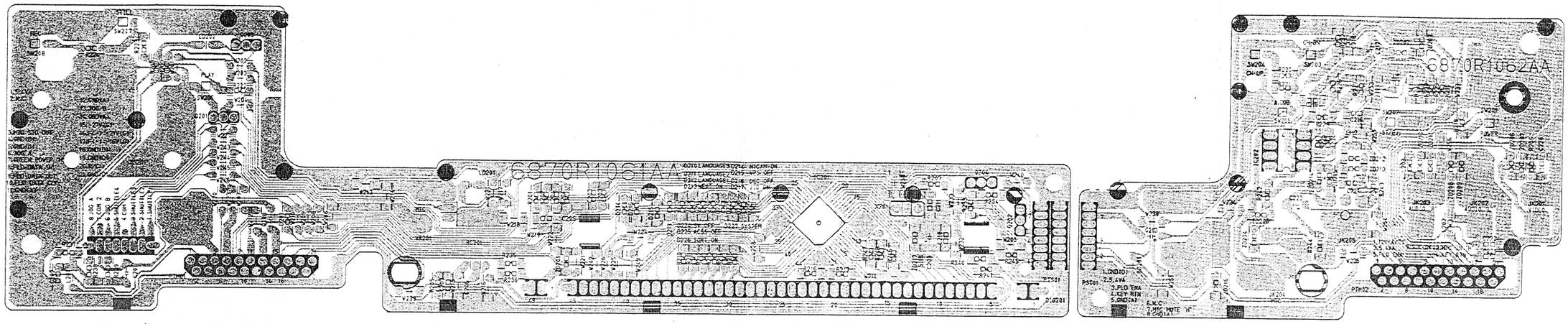
(Solder Side)

5. Premiere & Scart P.C.Board



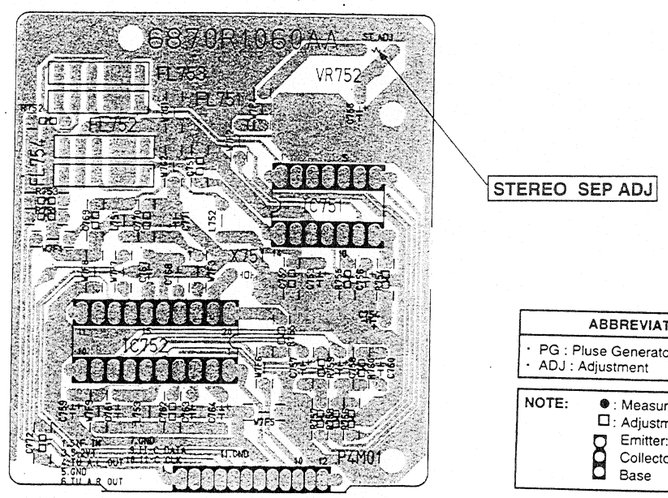
(Solder Side)

6. Timer P.C.Board



(Solder Side)

7. 2 Carrier P.C.Board



STEREO SEP ADJ

ABBREVIATIONS
· PG : Pluse Generator · ADJ : Adjustment

NOTE: ● : Measurement Point
□ : Adjustment Point
Emitter: TRANSISTOR
Collector
Base

(Solder Side)

1. Front Loading Mechanism Assembly (Fig. A-1)

1) Remove the Top and Bottom Covers and Front Panel.
2) Remove two screws(A).
3) Lift up the Front Loading Mechanism Assembly in the direction of arrow(B).

NOTE

When disassembling and reassembling:
ⓘ Give special attention to removal and to reassembly because two tabs(L), (R) are engaged.

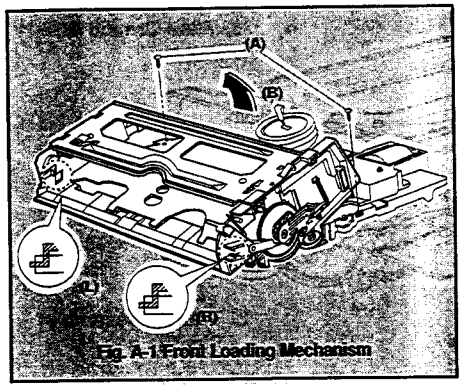


Fig. A-1 Front Loading Mechanism

2. Guide Cassette (Fig. A-2)

1) Push tab(R) of the Cassette Guide and disengage with Bracket Side(R) and push tab(L) of the cassette Guide which is engaged with Bracket Side(L) and remove it in the direction of arrow (B).

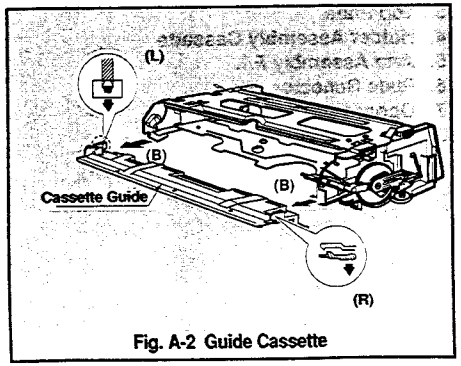


Fig. A-2 Guide Cassette

3. Bracket Assembly Side (R) (Fig. A-3)

1) Push the tabs(L), (R) of Bracket Assembly Side(R) to disengage with the Top Plate and remove it in the direction of arrow(A).

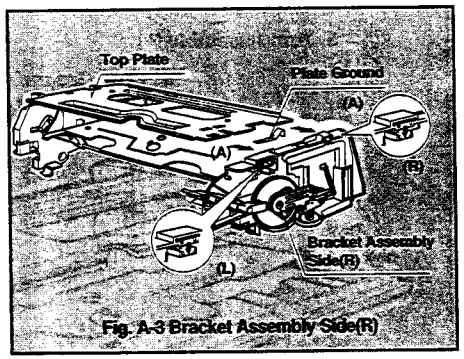


Fig. A-3 Bracket Assembly Side(R)

4. Bracket Side(L)/Top Plate (Fig. A-4)

1) Remove the screw(B).
2) Remove the plate Ground(L), in the direction of arrow(A).
3) Push the locking tab(L1) and then remove the Bracket Side(L) in the direction of arrow(B).
4) The Top Plate can be removed by Separating the Bracket Side(L).

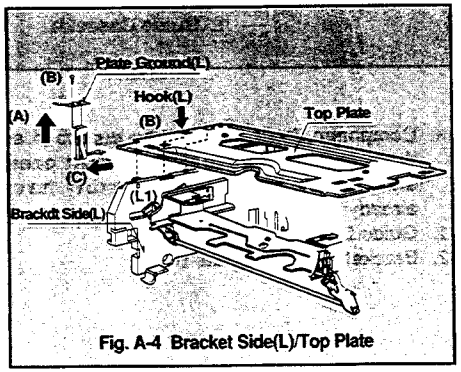


Fig. A-4 Bracket Side(L)/Top Plate

5. Holder Assembly Cassette (Fig. A-5)

1) Separate the Bracket Assembly Side(R).
2) Push the two lever tabs(L), (R) down and separate the Holder Assembly Cassette and the Arm Assembly F/L from the Top Plate.

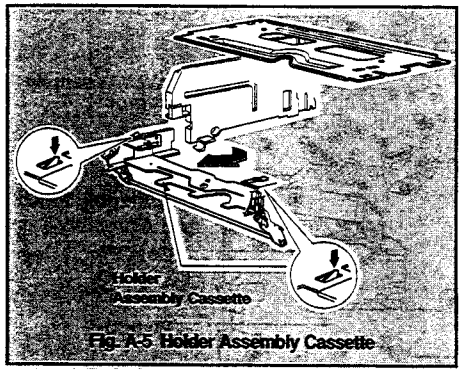


Fig. A-5 Holder Assembly Cassette

6. Arm Assembly F/L (Fig. A-6)

1) Remove by pulling the Arm F/L(R) from the Bracket Holder(R) Boss in the direction of arrow(A).
2) Separate the Arm Assembly F/L from Cassette Holder Boss in the direction of arrow(B).

NOTE

When disassembling and reassembling:
ⓘ Be sure to remove the Arm F/L(R) first. If not the Arm Assembly F/L can be damaged.

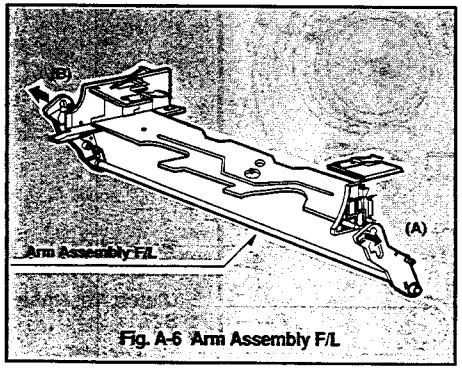


Fig. A-6 Arm Assembly F/L

7. Spring Stopper (Fig. A-7)

1) Remove the Spring Stopper which is connected to the tabs(A), (B) of the Lever Stopper(R) and the Bracket Holder(R).

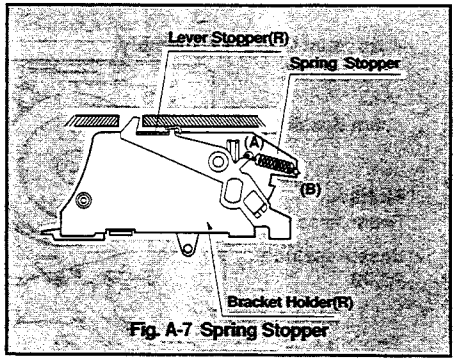


Fig. A-7 Spring Stopper

8. Plate Reflector (Fig. A-8)

1) Detach the Plate Reflector(L) from the Bracket Side(L) by using a knife.
2) Detach the Plate Reflector(R) from the Bracket Assembly Side(R) by using a knife.

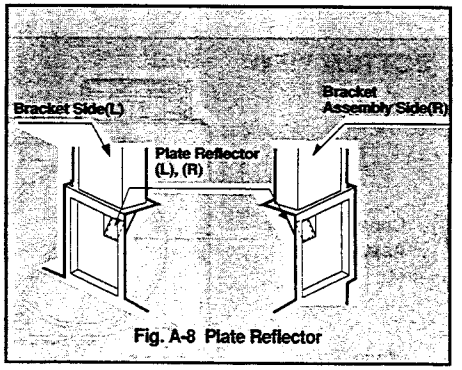


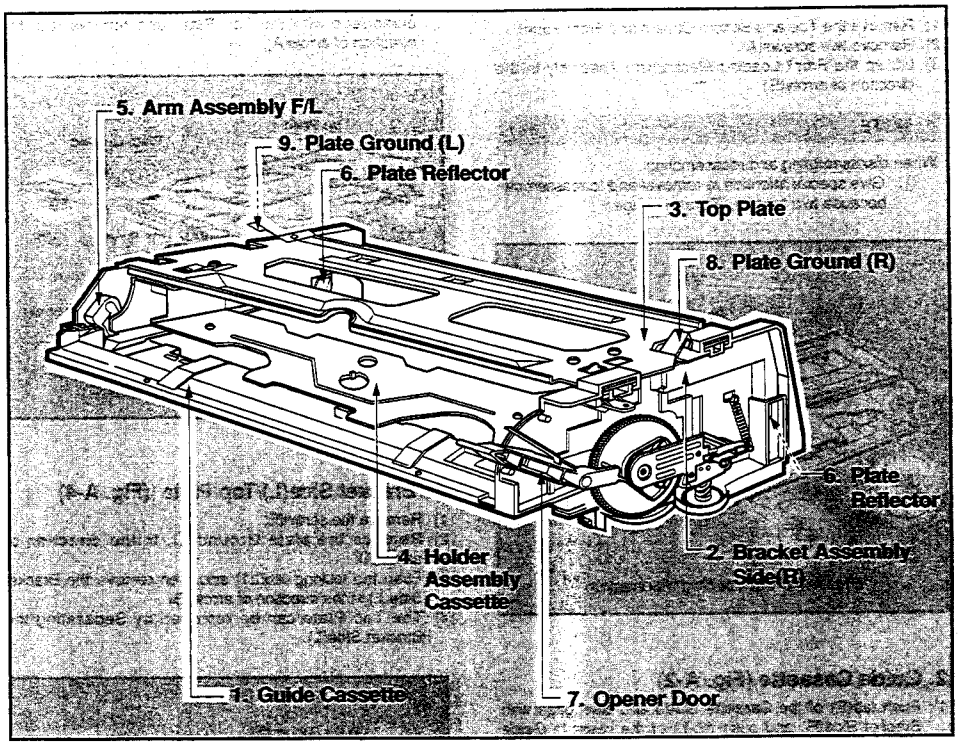
Fig. A-8 Plate Reflector

SECTION 4 MECHANISM

CONTENTS

FRONT LOADING MECHANISM DISASSEMBLY

- **Front Loading Mechanism Assembly, Parts Location**

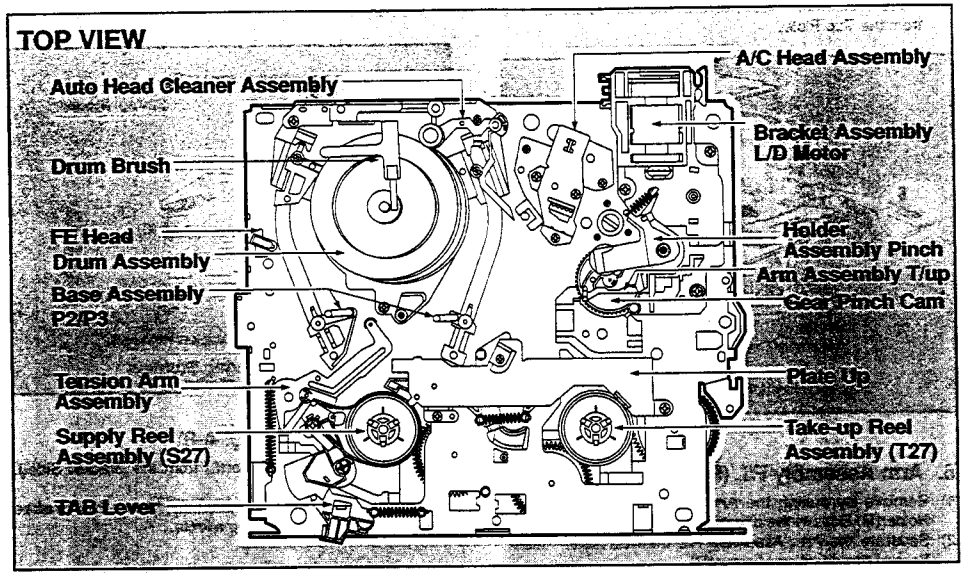


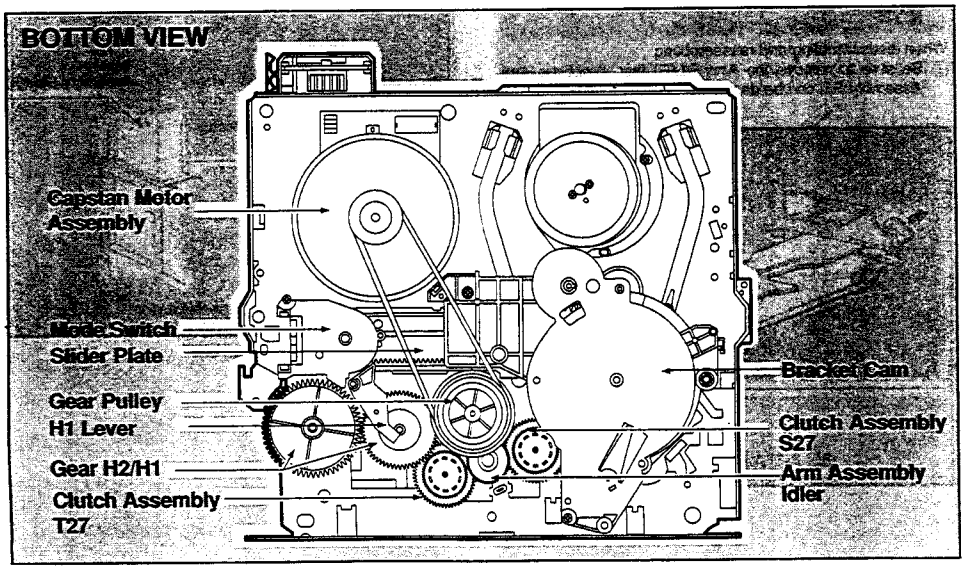
※ Component list below will be discribed as if the top and bottom covers, front panel and deck mechanism assembly have already been removed.

1. **Guide Cassette**
2. **Bracket Assembly Side (R)**
3. **Top Plate**
4. **Holder Assembly Cassette**
5. **Arm Assembly F/L**
6. **Plate Reflector**
7. **Opener Door**
8. **Plate Ground(R)**
9. **Plate Ground(L)**

DECK MECHANISM DISASSEMBLY

- **Deck Mechanism Parts Location**





DECK MECHANISM DISASSEMBLY

1. Auto Head Cleaner Assembly (Fig. B-1)

(Optional Item)

1) Push the tab(A) of Auto Head Cleaner and remove the Cleaner Arm Assembly.

NOTES:

When disassembling and reassembling:

① Do not allow fingers or tools to touch the outside of the Drum.

② Be careful not to get any foreign substance on the Roller.

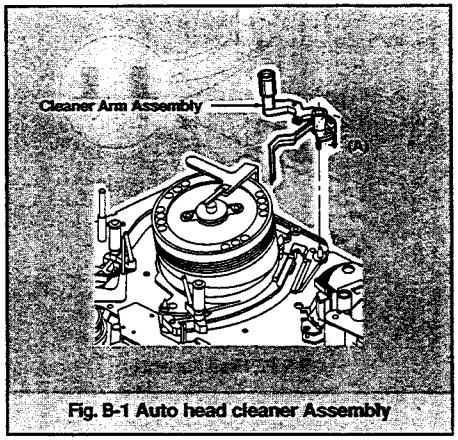


Fig. B-1 Auto head cleaner Assembly

2. Drum and Base Assembly (Fig. B-2)

1) Remove the Auto Head Cleaner Assembly. (option)
2) Remove three screws(A) and separate the Drum Assembly, Drum Base and the Drum Brush from the Deck Mechanism Assembly.
3) Remove three screws(B) on the back side and remove the Drum Assembly from the Drum Base.

NOTES:

When disassembling and reassembling:

① Do not touch the video tips with fingers or tools. Give special attention to disassembling and reassembling of Auto Head Cleaner Assembly.

② After assembling, adjust the tape transport system and Servo PG.

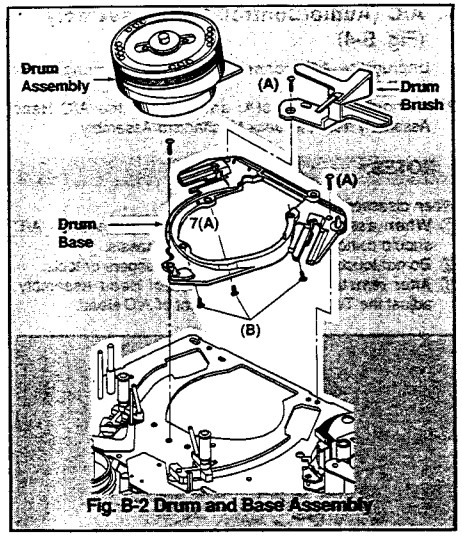


Fig. B-2 Drum and Base Assembly

3. Drum Sub Assembly and Motor Assembly (Fig. B-3-1)

1) Remove the Drum Base from the Deck Mechanism Assembly.
2) Separate the Drum Assembly from the Drum Base.
3) Remove two screws(A) and then remove the rotor.
4) Remove three screws(B) and then remove the stator.

NOTE

When disassembling and reassembling:

① Do not touch the video tips with fingers or tools.

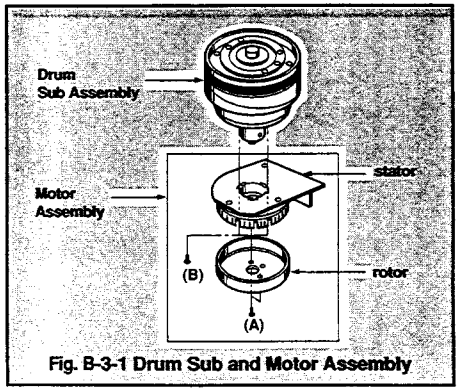


Fig. B-3-1 Drum Sub and Motor Assembly

4. A/C (Audio/Control) Head Assembly (Fig. B-4)

1) Unplug the A/C connector from the Loading Motor P.C.B.
2) Remove two screws(A) and remove the A/C Head Assembly from the Deck Mechanism Assembly.

NOTES:

When disassembling and reassembling:
① When assembling, the 3mm hole of the Base A/C should coincide to 3mm hole in the Chassis.
② Do not touch the A/C Head Tips with fingers or tools.
③ After reinstalling the Audio Control Head Assembly, adjust the Tilt, Azimuth and Height of A/C Head.

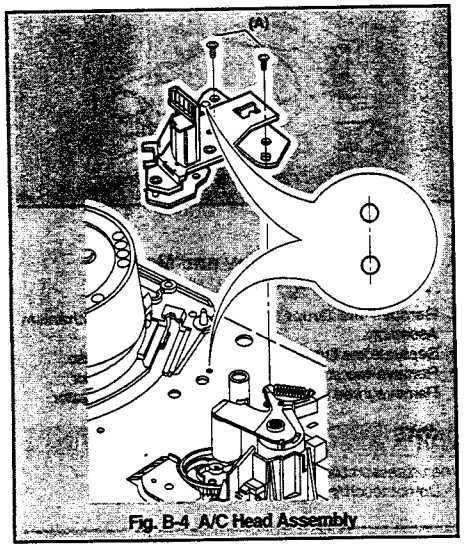


Fig. B-4 A/C Head Assembly

5. FE (Full Erase) Head Assembly (Fig. B-5) (Optional Item)

1) Push two tabs(A) and remove the FE Head.

NOTE

When disassembling and reassembling:
① Be careful not to get any foreign substance on the FE Head.

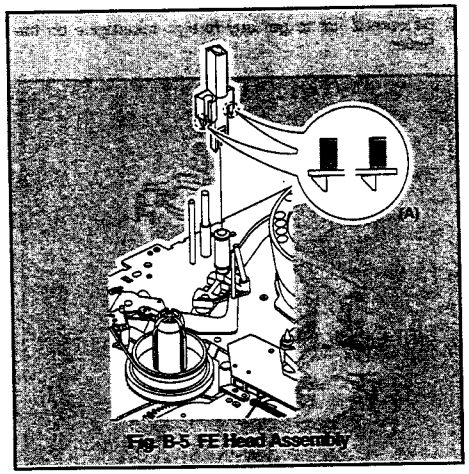


Fig. B-5 FE Head Assembly

6. Plate Up/Supply Main Brake/Take up Main Brake/Body Prism Led Assembly (Fig. B-6)

1) Plate Up
   ① Remove three screws(A) and remove the Plate Up.
2) Supply Main Brake
   ① Remove the Spring MB.
   ② Lift up the Supply Main Brake.
3) Take-Up Main Brake
   ① Lift up the Take-Up Main Brake.
4) Body Prism Led
   ① Remove the Body Prism Led.

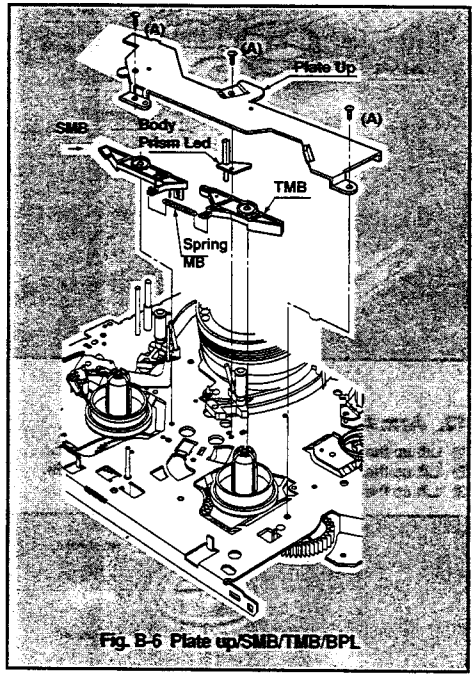


Fig. B-6 Plate up/SMB/TMB/BPL

7. Tension Arm/Lever Assembly Tension (Fig. B-7)

1) Remove the Spring Tension.
2) Push the tab(A) of the Base Tension on the back cover of the Deck Mechanism Assembly outward and remove the Tension Arm Assembly.
3) Push the tab(B) on the back side of the Holder Band(A) and remove the Tension Arm Assembly.
4) Push two tabs(C) on the bottom side of the Lever Tension and Lift up the Lever Assembly Tension.

NOTES:

When disassembling and reassembling:
① (D) is engaged to the cam groove of the Gear Cam L/D and two tabs(C) are engaged in the chassis. (care must be taken not to damage the two tabs when disassembling and reassembling)
② When disassembling, turn to the counterclockwise and lift up so that grease which may be on (D) is not transfered to the Reel Brake Drum.
③ When assembling, the 2.5mm hole of the Lever Assembly Tension should be aligned with the 2.5mm hole in the chassis.
④ After reassembling, adjust the Tension.

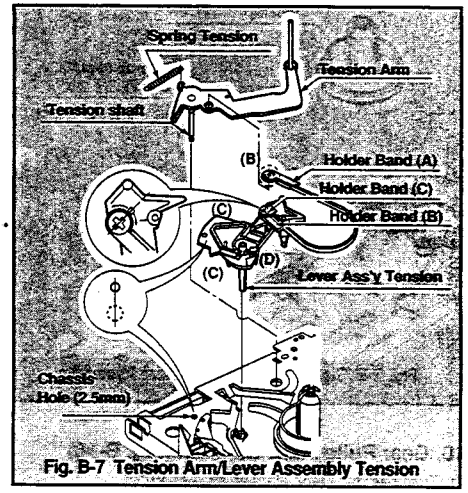


Fig. B-7 Tension Arm/Lever Assembly Tension

8. TAB Lever (Fig. B-8)

(Optional Item)

1) Remove the Lever Ass'y Tension.
2) Remove the Spring TAB.
3) Push the tab(A) on the bottom side of TAB Lever and remove the TAB Lever.

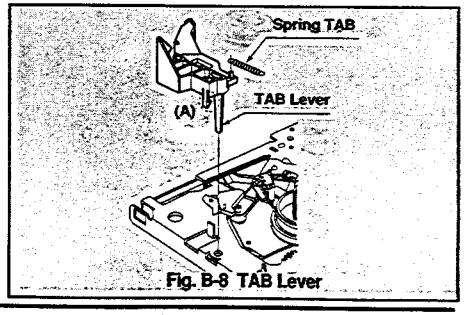


Fig. B-8 TAB Lever

9. Supply Reel/Take Up Reel Assembly (Fig. B-9)

1) Lift up Reel(S), (T) after removing the Plate Up and Band Assembly.

NOTES:

① Be sure not to interchange the Take-up Reel and the Supply Reel.
② Do not allow the Brake Drum to come in contact with grease.

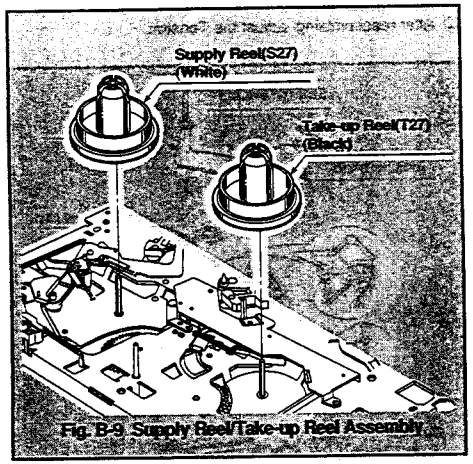


Fig. B-9 Supply Reel/Take-up Reel Assembly

10. Gear Pulley/Belt Capstan (Fig. B-10)

1) Turn over the Deck Mechanism Assembly.
2) Remove the Belt Capstan.
3) Remove the washer(A) and then lift up the Gear Pulley.

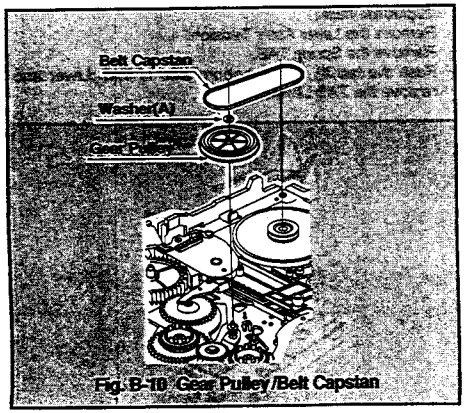


Fig. B-10 Gear Pulley/Belt Capstan

11. Gear H1, H2/Lever H1 (Fig. B-11)

1) Push and lift up the hook(B) of Lever H1.
2) Remove the washer(A) and then lift up the Gear H1.
3) Lift up the Spring H1.
4) Push and lift up the hook(B) of the Gear H2.

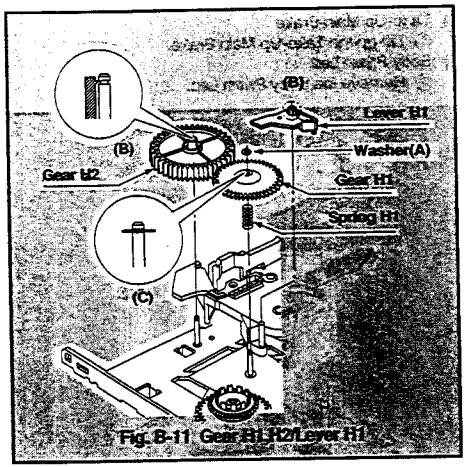


Fig. B-11 Gear H1,H2/Lever H1

12. Arm Assembly Idler (Fig. B-12)

1) Lift up the Gear Pulley after removing the washer(A).
2) Lift up the Spring Up/D after removing the washer(B).
3) Lift up the Arm Assembly Idler.

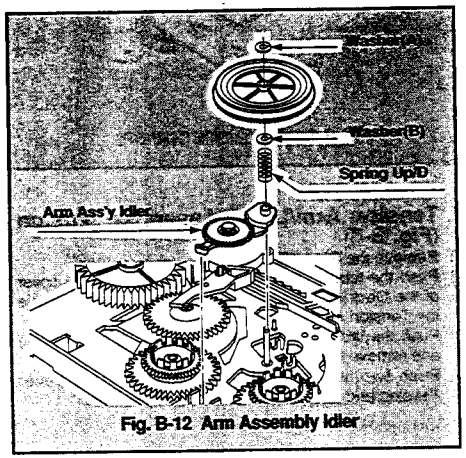


Fig. B-12 Arm Assembly Idler

13. Mode S/W (Fig. B-13)

1) Lift up the Lever H1.
2) Remove the screw(A) and lift up the Mode S/W.

NOTE

① When assembling mode, the groove of Gear (∩) and Body (o) of the Mode Switch should be aligned.

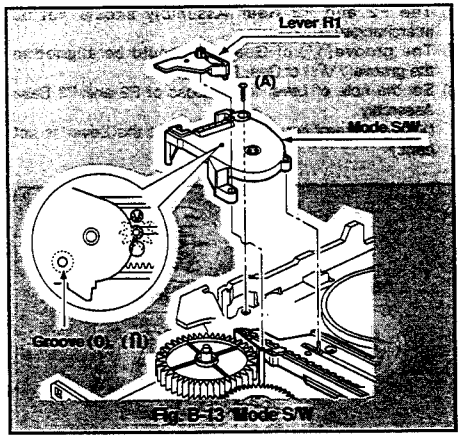


Fig. B-13 Mode S/W

14. Capstan Motor Assembly (Fig. B-14)

1) Remove three Screws(A) on the top side and remove the Capstan Motor Assembly.

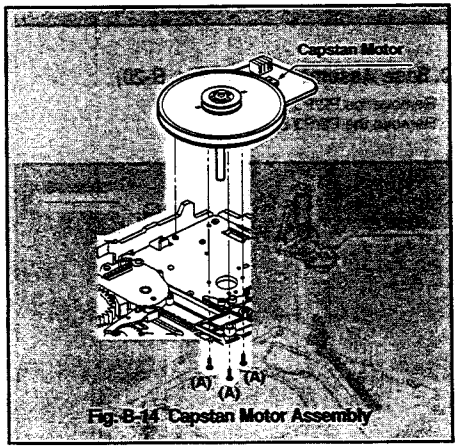


Fig. B-14 Capstan Motor Assembly

15. CAM Bracket Assembly (Fig. B-15)

1) Remove three screws(A).
2) Remove the CAM Bracket Assembly.

NOTE

① The (Tension Shaft Holder) fixes the Tension Shaft on Fig B-7. therefore when the CAM Bracket Assembly is removed, First remove the Tension Arm on Fig B-7.

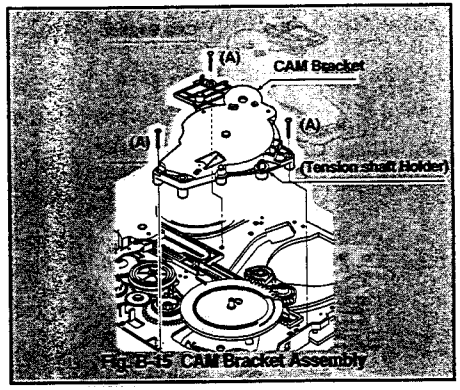


Fig. B-15 CAM Bracket Assembly

16. Cam Bracket/Lever Jog/Gear Jog (Fig. B-16) (Optional Item)

1) Remove the Cam Bracket Assembly.
2) Remove the Spring Jog.
3) Push the tab(A) and remove the Lever Jog.
4) Push the tab(B) and remove the Gear Jog.

NOTE

① The tab(B) on the Gear Jog should be in groove of the Lever Jog.

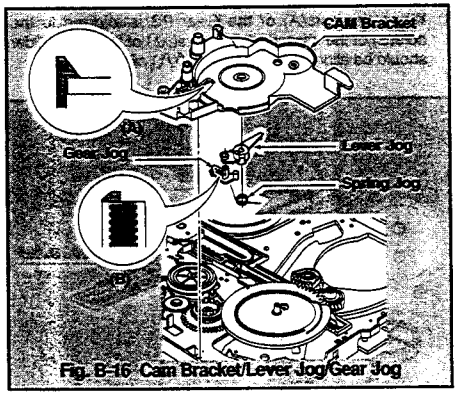


Fig. B-16 Cam Bracket/Lever Jog/Gear Jog

17. Gear Cam L/D (Fig. B-17)

1) Remove the Cam Bracket Assembly.
2) Remove the Gear Cam L/D.

NOTE

1) When assembling the Gear Cam L/D, the groove (/\) of Plate Slider should coincide with to the groove (V) on the Gear Cam L/D.

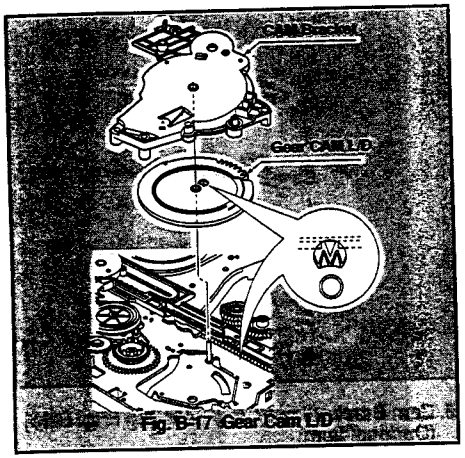


Fig. B-17 Gear Cam L/D

18. Gear PS/Plate Slider (Fig. B-18)

1) Remove two washers(C).
2) Remove the Plate Slider.
3) Remove the Gear PS.

NOTE

1) When the hole(A) of the Gear PS is aligned to the hole(B) of the chassis, the groove(V) of the Plate Slider should be aligned to the groove(/\) of the Gear PS.

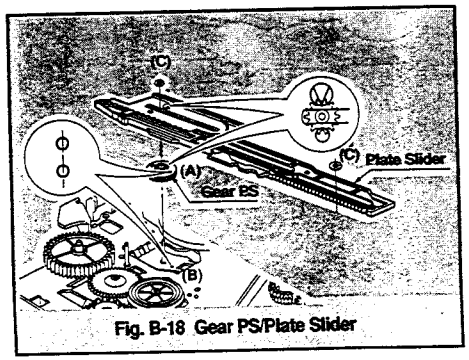


Fig. B-18 Gear PS/Plate Slider

19. Gear Assembly P2/P3 (Fig. B-19)

1) Remove the Plate Slider.
2) Remove by pushing one hook(B) on the top side of Gear Assembly P3.
3) Remove by pushing one hook(A) on the top side of Gear Assembly P2.

NOTES:

When disassembling and reassembling:
① The P2 and P3 Gear Assembly should not be interchanged.
② The groove(V), of Gear P2 should be aligned to the groove(/\) of Gear P3.
③ Set the hole of Lever to the Boss of P2 and P3 Base Assembly.
(When assembling make sure that the Lever is not bent.)

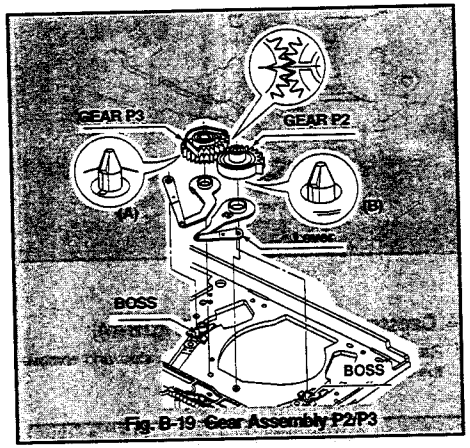


Fig. B-19 Gear Assembly P2/P3

20. Base Assembly P2/P3 (Fig. B-20)

1) Remove the P2/P3 Gear Assembly.
2) Remove the P2/P3 Base Assembly.

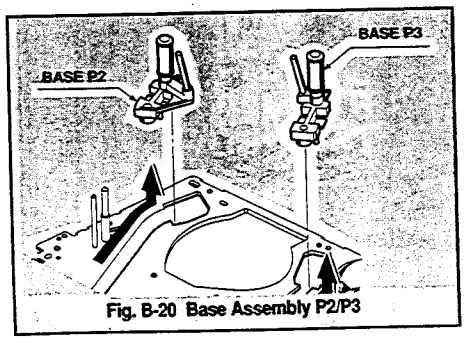


Fig. B-20 Base Assembly P2/P3

21. Guide Roller Assembly (Fig. B-21)

1) Remove two screws(A).
2) Remove the Guide Roller From the Base P2/P3 by turning it.

NOTE

When disassembling and reassembling:
① The P2 and P3 Base should not be interchanged.

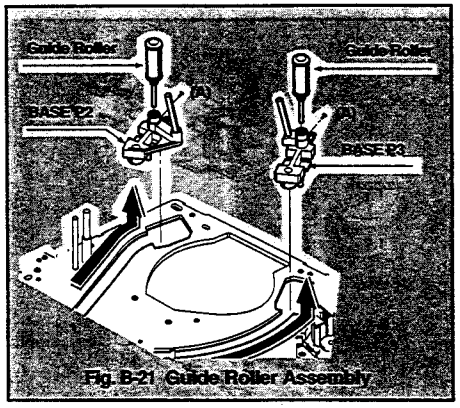


Fig. B-21 Guide Roller Assembly

22. Clutch Assembly S27 (Fig. B-22)

1) Remove the Gear Cam L/D and the Arm Assembly Idler.
2) Remove the washer(A).
3) Remove the Clutch Assembly S27.

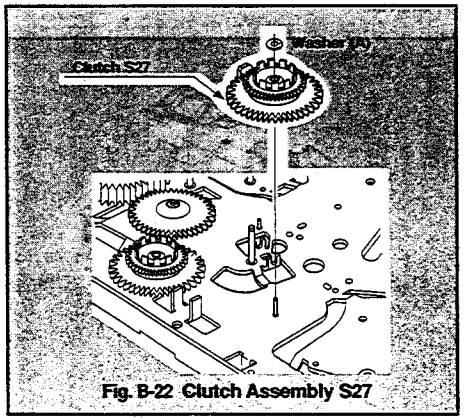


Fig. B-22 Clutch Assembly S27

23. Clutch Assembly T27 (Fig. B-23)

1) Remove the Gear H1 and Arm Assembly Idler.
2) Remove the washer(A).
3) Remove the Clutch Assembly T27.

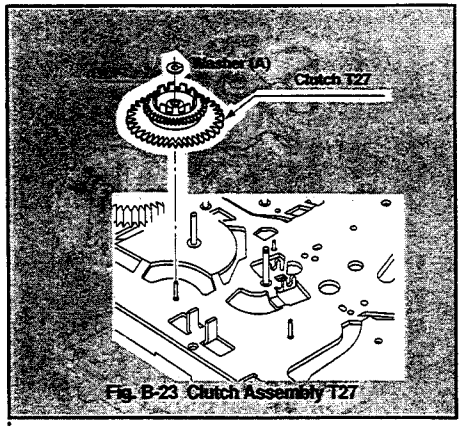


Fig. B-23 Clutch Assembly T27

24. Lever F/R & Arm F/R (Fig. B-24)

1) Remove the Plate Slider.
2) Remove the washer(A).
3) Remove the Lever F/R.
4) Remove the Arm Assembly Idler.
5) Remove the Arm F/R.

NOTE

1) When disassembling the Arm F/R should be horizontal.

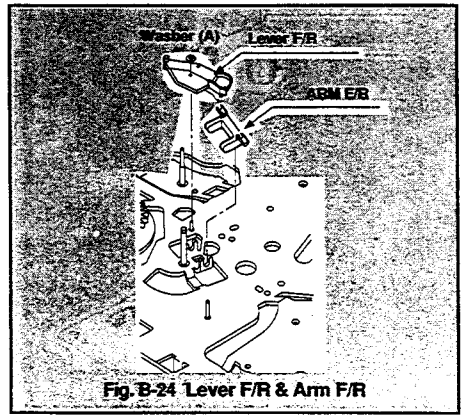


Fig. B-24 Lever F/R & Arm F/R

33. Gear Pinch Cam (Fig. B-33)

1) Remove the T/Up Arm Assembly.
2) Remove by pushing one tab(A) on the bottom side of the Gear Pinch Cam.

NOTE

When disassembling and reassembling:
① The small hole on the Gear Pinch Cam and hole of chassis should be aligned.

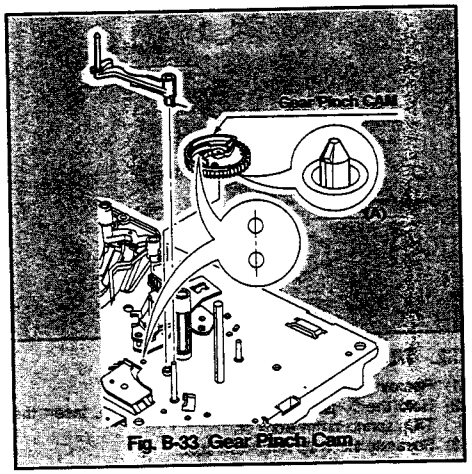
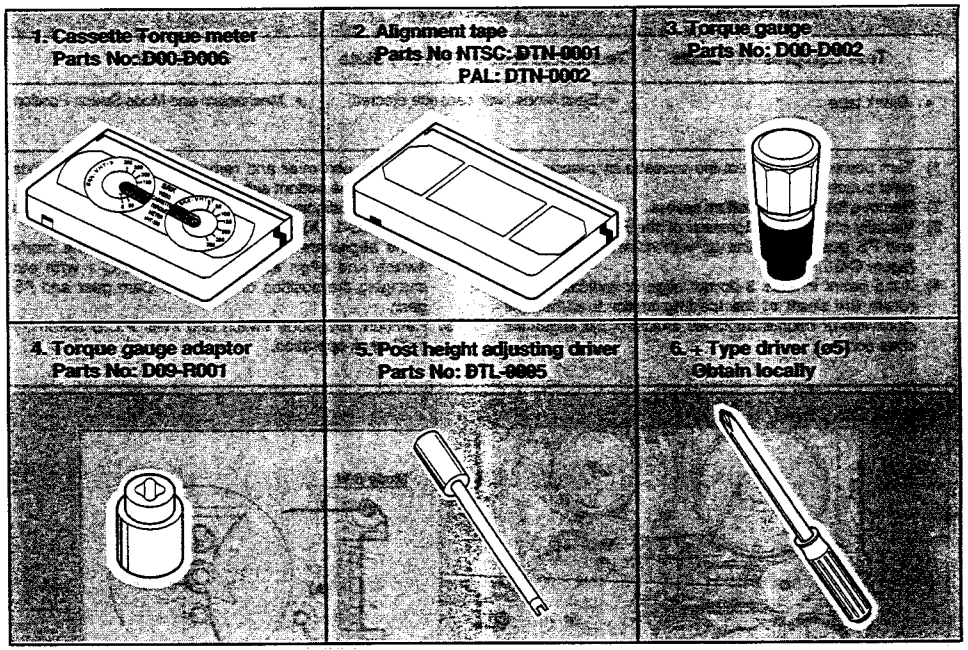


Fig. B-33 Gear Pinch Cam

● Tools and Fixtures for Deck



25. Holder Pinch Assembly (Fig. B-25)

1) Separate the Holder Pinch Assembly by pushing tab(A) on the L/D Motor Bracket in the direction of arrow (B).

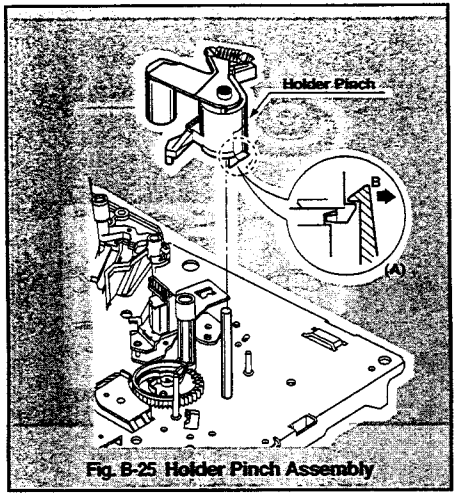


Fig. B-25 Holder Pinch Assembly

26. Pinch Arm Assembly (Fig. B-26)

1) Remove the Spring Pinch.
2) Remove the Pinch Arm Assembly by turning it counterclockwise.

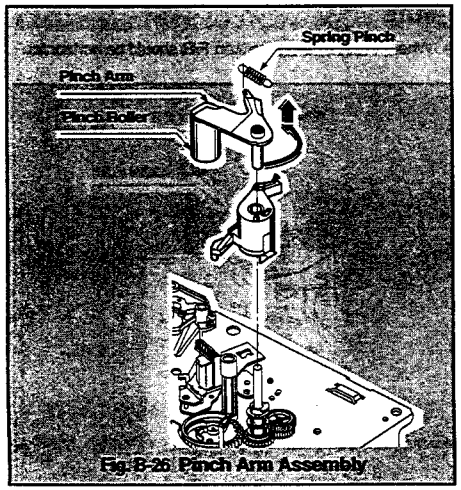


Fig. B-26 Pinch Arm Assembly

27. L/D Motor Bracket Assembly (Fig. B-27)

1) Remove three Screws(A).
2) Push the tabs(A) and remove the L/D Motor Bracket Assembly.

NOTES:

When assembling and disassembling:
① Make sure Grease from the Gear Pinch does not come in contact with the wing of the L/D Motor Bracket.

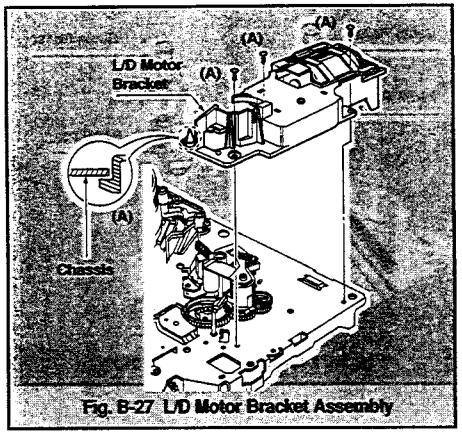


Fig. B-27 L/D Motor Bracket Assembly

28. Worm Wheel (Fig. B-28)

1) Remove the L/D Motor Bracket Assembly.
2) Push two Tabs(A) on the L/D Motor Bracket and then remove it.

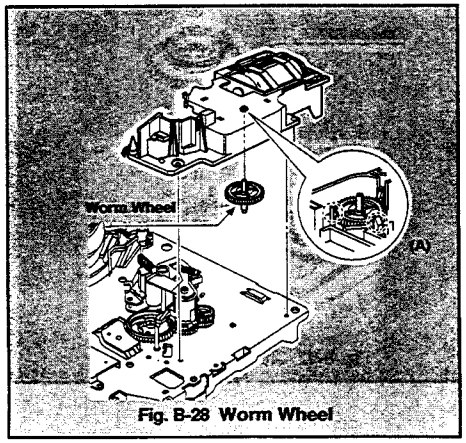


Fig. B-28 Worm Wheel

29. L/D Motor Assembly & Worm L/D Motor & L/D Motor Bracket (Fig. B-29)

1) Remove the L/D Motor Bracket Assembly.
2) Push the L/D Motor Assembly in lower direction and then remove.
3) Remove the Worm L/D Motor from the L/D Motor Assembly in the direction of arrow (A).
4) Remove the L/D Motor Assembly and the Worm L/D Motor and then L/D Motor Bracket is removed.

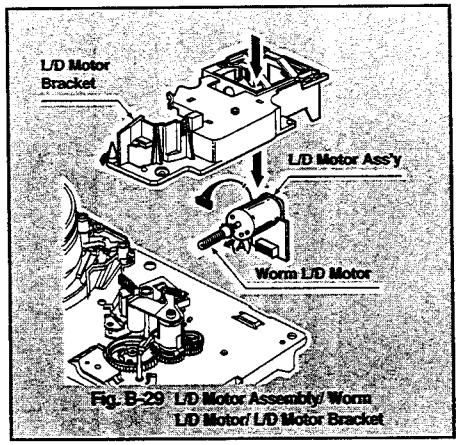


Fig. B-29 L/D Motor Assembly/ Worm L/D Motor/ L/D Motor Bracket

30. Gear CNT (Fig. B-30)

1) Remove the L/D Motor Bracket Assembly.
2) Remove the Pinch Arm Assembly.
3) Remove the Gear CNT.

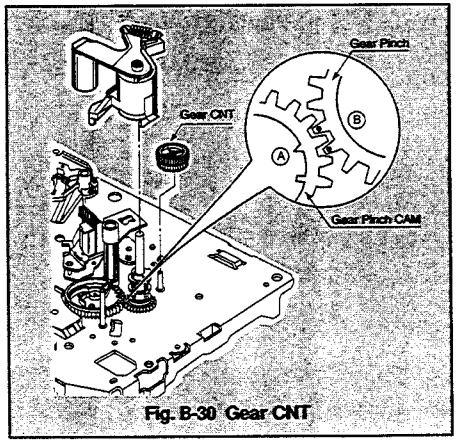


Fig. B-30 Gear CNT

31. Gear Pinch (Fig. B-31)

1) Remove the Pinch Arm Assembly.
2) Remove the Gear CNT.
3) Remove the Gear Pinch.
4) When reassembling, make sure that the two teeth, Gear pinch CAM(Ⓐ) and Gear pinch(Ⓑ), with timing marks line up with the arrow at two o'clock on the Pinch Cam Gear. (See Fig on B-30)

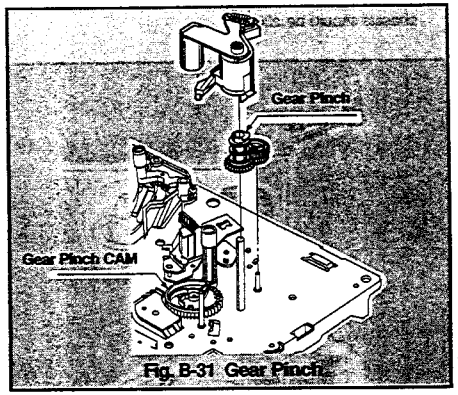


Fig. B-31 Gear Pinch

32. T/Up Arm Assembly (Fig. B-32)

1) Remove the L/D Motor Bracket Assembly.
2) Hold the Ⓐ part of T/Up Arm, at this time, insert the T/Up spring in the Hook Ⓗ.
3) Separate the T/Up Arm Assembly.
4) Remove the T/Up spring.

NOTES:

When reassembling,
① Insert the T/Up spring in the Hook Ⓗ as above **No. 32. 2)**.
② Place the T/Up Arm Assembly at the back of Ⓑ part.

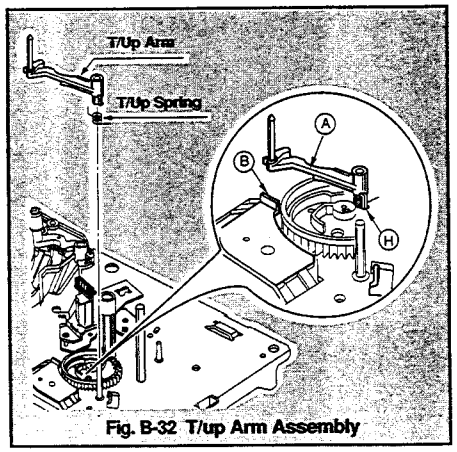


Fig. B-32 T/up Arm Assembly

4. Checking Torque

Purpose: To insure smooth transport of the tape during each mode of operation. If tape transport is abnormal, then check the torque as indicated by the chart below.

Test Equipment / Fixture	Test Conditions VCR(VCP) State
• Torque Gauge(600 g/cm ATG) • Torque Gauge Adaptor • Cassette Torque Meter V┌NTSC: 16.67msec └PAL: 20msec	• Set the VCR to each operating mode without inserting a cassette. (See '2. Preparation for Adjustment'. Page 4-17)

Item	Mode	Test Equipment	Measurement Reel	Measurement Values
Slack Removal Torque	Unloading	Cassette Torque Meter	Supply Reel	More than 150~270g·cm
Fast Forward Torque	Fast Forward	Cassette Torque Gauge	Take-Up Reel	More than 500g·cm
Rewind Torque	Rewind	Cassette Torque Gauge	Supply Reel	More than 500g·cm
Play Take-Up Torque	Play	Cassette Torque Meter	Take-Up Reel	55~95g·cm
Review Torque	Review	Cassette Torque Meter	Supply Reel	170~250g·cm

Checking Method:
The Values are measured by using a torque gauge and torque gauge adaptor with the torque gauge affixed.

NOTE
The torque reading to measure occurs when the tape abruptly changes direction from fast forward or rewind mode, when quick braking is applied to both reels.

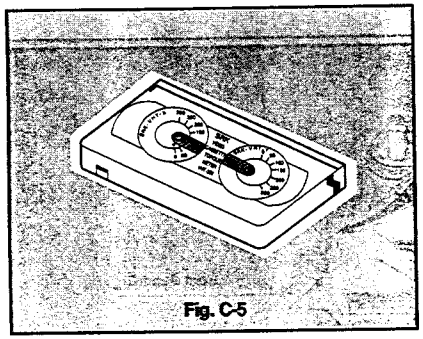


Fig. C-5

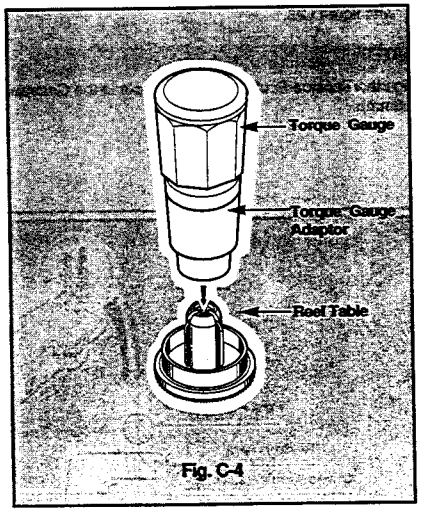


Fig. C-4

5. Guide Roller Height Adjustment

Purpose: To regulate the height of the tape so that the bottom of the tape runs along the tape guide line on the lower drum.

A. Preliminary Adjustment

Test Equipment / Fixture	Test Conditions VCR(VCP) State	Adjustment Point
• Post Height Adjusting Driver • Hexagonal Wrench or Allen Wrench Phillips screw driver	• Allows a good tape to play normally in spite of a damaged guide roller.	• Guide Roller Height Adjustment screws on the Supply and Take-Up Guide Rollers.

Adjustment Procedure
1) Perform the precise adjustment(See below B).
2) If the Guide Roller is damaged, loosen the Guide Roller retaining screw and replace the Guide Roller.
3) Adjust the height of P2, P3 so that TAPE is adjacent to the guide line.

ADJUSTMENT DIAGRAM

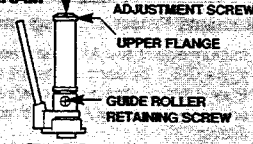


Fig. C-5-1

B. Precise Adjustment

Test Equipment / Fixture	Test Equipment Connection Points	Test Conditions VCR(VCP) State	Adjustment Point
• Oscilloscope • Alignment Tape • Post Height Adjusting Driver	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL : SW 25Hz • Head Switching Output Point • RF Envelope Output Point	• Play an alignment tape	• Guide Roller Height Adjustment Screws.

Adjustment Procedure
1) Play an alignment tape after connecting the probe of the oscilloscope to the RF Envelope Output Test Point and Head Switching Output Test Point.
2) Tracking Control (in PB mode): Center position (When this adjustment is performed after the drum assembly has been replaced, set the tracking control so that the RF output is maximum.)
3) Height adjustment screw: Flatten the RF waveform. (Fig. C-5-2)
4) Turn (Move) the tracking control (in the Playback mode) clockwise and counterclockwise. (Fig. C-5-3))
5) Check that any drop of RF output is uniform at the start and end of the waveform.

CAUTION
If the adjustment is excessive or insufficient the tape will jam or fold.

Waveform Diagrams

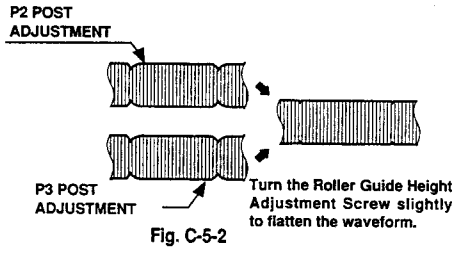


Fig. C-5-2

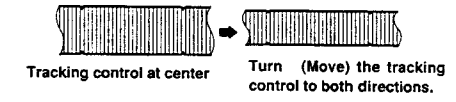
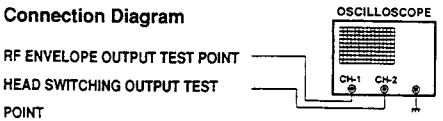


Fig. C-5-3

Connection Diagram



MECHANISM ADJUSTMENT

1. Mechanism and Mode Switch Alignment Check

Purpose: To determine if the mode switch and mechanism are in the correct position, when a tape is ejected from the loading mechanism.

Test Equipment / Fixture	Test Conditions VCR (VCP) State	Check Point
• Blank tape	• Eject Mode (with cassette ejected)	• Mechanism and Mode Switch Position

1) Turn power on and eject the cassette by pressing the eject button.
2) Remove the top and bottom covers.
3) Visually check the alignment of the Pinch Cam gear and PS gear holes, line up with holes in the chassis (figure C-2).
4) If the gears in step 3 do not align as indicated, then rotate the shaft of the loading motor to either the clockwise or counterclockwise direction until alignment does occur.
5) Turn the unit over and remove the main P.C.B thus exposing the bottom side of the deck mechanism.
6) Check the alignment of the mode switch as illustrated in figure C-1, (A).
7) If the alignment is incorrect then remove the mode switch and align as shown in figure C-1 with out changing the position of the Pinch Cam gear and PS gear.
8) Remount the mode switch and main P.C.B assembly and check operation.

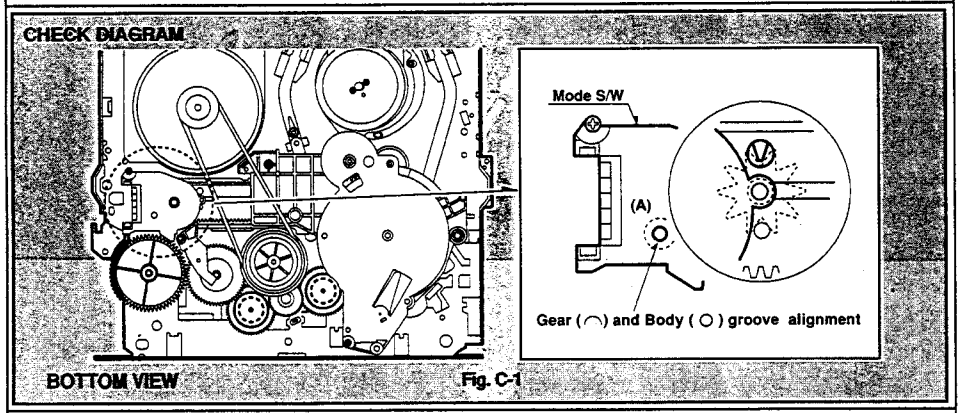


Fig. C-1

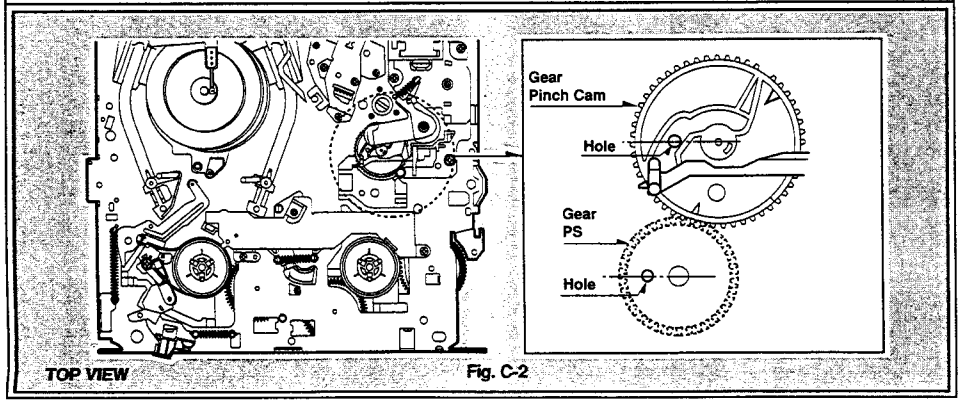


Fig. C-2

MECHANISM ADJUSTMENT

2. Preparation for Adjustment (To set VCR (VCP) to the loading state without inserting a cassette.)

1) Unplug the Power Cord from the AC outlet.
2) Separate the Top Cover and Front Loading Mechanism.
3) Plug the Power Cord into the AC outlet.
4) Turn the VCR on and push the tact switch in the P.C.B. Assembly.
   The VCR can accept inputs for each mode in this case. However the rewind and review operation cannot be performed for more than a few seconds because the take-up reel table is in the stop state and reel pulses cannot be detected.

NOTE

Cover the holes in the end sensors with black tape to prevent a light leak.

NOTES:

Always return the VCR(VCP) to the Front Loading Mechanism Assembly State in the following order after the above operations have been performed.

1) Press the Eject button after turning the power ON.
2) Wait for about 10 seconds until searching out the assembly position.
3) Assemble the Front Loading Mechanism and connect the Front Loading Mechanism Connector.
4) Refer to the "Front Loading Mechanism Disassembly" Section.

3. Tension Post Position and Tension Adjustment

Purpose: To insure uniform tape contact with the video head by maintaining constant tape tension.

Test Equipment / Fixture	Test Conditions VCR(VCP) State	Adjustment Point
• Cassette Torque Meter (For play 100g/cm)	• Position Adjustment: Play without a cassette • Tension Check: Play	• Holder Band B and C

Position Adjustment

1) Remove cassette.
2) Adjust the position of tension post in accordance with figure C-3.

NOTE

Align the Tension Post (2mm) to the hole in the Chassis (2.5mm).

Tension Adjustment

1) Turn on VCR and load the cassette torque meter.
2) Press the play button and observe the torque tension on the supply reel (spec. 37g/cm+5g/cm).
3) If torque is out of spec. then use a Phillips screw driver and move the screw head located in the center of the B and C band hold; to either the right or left until correct torque is indicated.

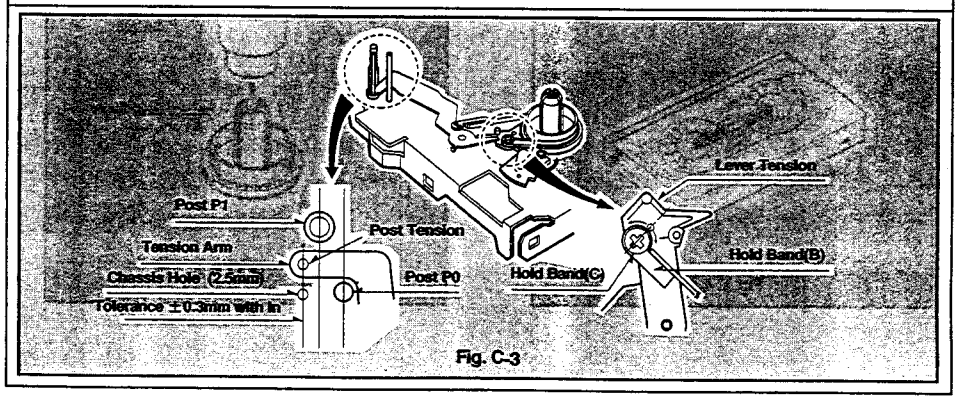


Fig. C-3

6. Audio/Control (A/C) Head Adjustment

Purpose: To insure that the tape passes accurately over the audio and control tracks in exact alignment in both the record and playback modes.

A. Preliminary Adjustment (Height and tilt adjustment)
Perform the Preliminary adjustment, when there is no Audio Output signal with a blank tape.

Test Equipment / Fixture	Test Conditions VCR(VCP) State	Adjustment Points
• Blank Tape • Screw Driver(+) Type 5mm	• Play the blank tape (CTL Tape)	• Tilt Adjustment Screw(C) • Height Adjustment Screw(B) • Azimuth Adjustment Screw(A)

Adjustment Procedure /Diagrams

1) Initially adjust the A/C head assembly as shown in figure C-6-1, by using the height adjustment screw(B).
2) Play a blank tape and observe if the tape passes accurately over the A/C head without tape curling or folding.
3) If folding or curling does occur then adjust the Tilt adjusting screw(C) while the tape is running to resemble figure C-6-3.
4) Confirm that the tape passes over the A/C head assembly as indicated by proper audio reproduction and proper tape counter performance.

NOTE

Ideal A/C head height occurs, when the tape runs between 0.2~0.25mm above the bottom edge of the A/C head core.

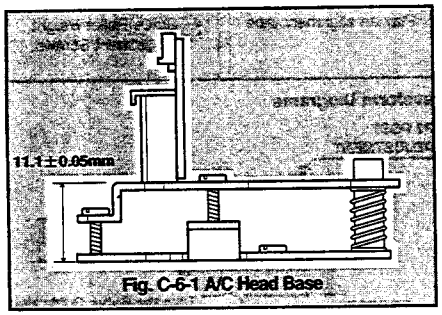


Fig. C-6-1 A/C Head Base

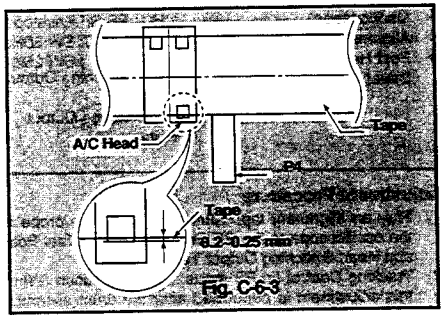


Fig. C-6-3

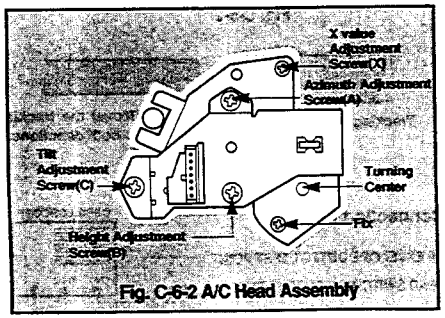


Fig. C-6-2 A/C Head Assembly

B. Confirm that the tape passes smoothly between the T/UP guide and the Pinch Roller (Using a mirror or the naked eye).

1) After completing step A. (Preliminary Adjustment), check that the tape passes around the T/UP post without folding at the top or bottom.
   If folding is observed, due the following:
   ① If folding is observed at the lower part of the T/UP post, then slowly turn the tilt adjustment in the clockwise direction to eliminate the curling.
   ② If folding is observed at the upper part of the T/UP post, then slowly turn the tilt adjustment in the counterclockwise direction to eliminate the tape curling.

C. RF Fine Adjustment (only if the RF waveform differs from figure C-5-3).

1) Check the RF Envelope after confirming smooth tape transport path at the T/UP Guide/Pinch Roller.

D. Precise Adjustment (Azimuth adjustment)

Test Equipment / Fixture	Test Equipment Connection Point	Test Conditions VCR (VCP) State	Adjustment Points
• Oscilloscope • Alignment tapes • Screw Driver(+) Type 5mm	• Audio output jack	• Play an alignment tape 1KHz, 7KHz sections.	• Azimuth Adjustment Screw(A) • Tilt Adjustment Screw(C)

Adjustment Procedure

1) Connect the probe of oscilloscope to Audio Output Jack.
2) Alternately adjust the Azimuth adjustment screw(A) and the Tilt adjustment screw(C) for maximum output of the 1KHz and 7KHz segments, while maintaining the flattest envelope differential between the two frequencies.

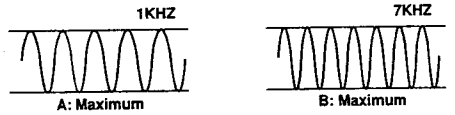


Fig. C-6-4

7. X-Value Adjustment

Purpose: To obtain compatibility with other VCR(VCP).

Test Equipment / Fixture	Test Equipment Connection Point	Test Conditions VCR (VCP) State	Adjustment diagrams
• Oscilloscope • Alignment tapes • Screw Driver(+) Type 5mm • Post Height Adjusting Driver	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL : SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play an alignment tape	Left / Right Groove at the Base A/C

Adjustment Procedure

1) Loosen the fixed mounting and X Value adjustment screw.
2) Allow the mechanism to run long enough for auto tracking to complete it's cycle.
3) Move the A/C base laterally in the direction as shown in the diagram to find the center of the peak that allows for the maximum waveform envelope. This method should allow the 30um head to be centrally located over the 60um tape track.
4) Tighten the A/C head assembly mounting screws.

Adjustment Diagram

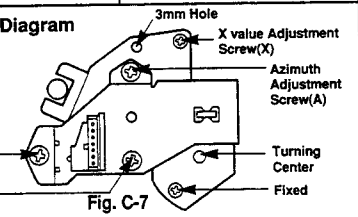
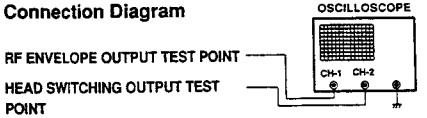


Fig. C-7

Connection Diagram



8. Adjustment after Replacing Drum Assembly (Video Heads)

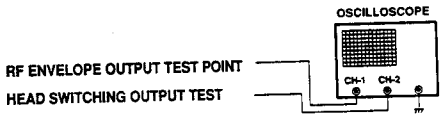
Purpose: To correct for shift in the roller guide and X value after replacing the drum.

Test Equipment / Fixture	Test Equipment Connection Points	Test Conditions VCR(VCP) State	Adjustment Points
• Oscilloscope • Alignment tape • Blank Tape • Post Height Adjusting Driver • Screw Driver(+) Type 5mm	• CH-1: PB RF Envelope • CH-2: NTSC: SW 30Hz PAL : SW 25Hz • Head Switching Output Test Point • RF Envelope Output Test Point	• Play the blank tape • Play an alignment tape	• Guide Roller Precise Adjustment • Switching Point • Tracking Preset • X-Value

Checking/Adjustment Procedure

Play a blank tape and check for tape curling or creasing around the roller guide. If there is a problem then follow the procedure 5. "Guide Roller Height" and 6. "Audio Control(A/C) Head Adjustment".

Connection Diagram



Waveform

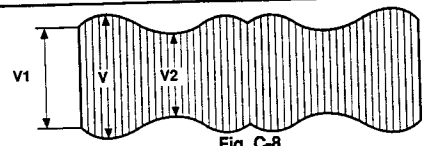


Fig. C-8

V1/V MAX ≥ 0.7
V2/V MAX ≥ 0.8
RF ENVELOPE OUTPUT POINT

9. Check the Tape Travel after Reassembling Deck Assembly.

9-1. Check Audio and RF Locking Time during playback and after CUE or REV (FF/REW)

Test Equipment / Fixture	Specification	Test Equipment Connection Points	Test Conditions VCR(VCP) State
• Oscilloscope • Alignment tape (with 6H 3kHz Color Bar Signal) • Stop Watch	• RF Locking Time: Less than 5 sec. • Audio Locking Time: Less than 10 sec.	• CH-1: PB RF Envelope • CH-2: Audio Output • RF Envelope Output Point • Audio Output Jack	• Play an alignment tape (with 6H 3kHz Color Bar Signal)

Checking Procedure

Play an alignment tape then change the operating mode to CUE or REV and confirm if the unit meets the above listed specifications.

NOTES:

1) CUE is fast forward mode (FF)
2) REV is the rewind mode (REW)
3) Referenced to the Play mode

9-2. Check the condition between the Audio and Video Sync. (Lip Sync.)

Test Equipment / Fixture	Specification	Test Equipment Connection Points	Test Conditions VCR(VCP) State
• Oscilloscope • Alignment Tape	• Less than ± ½ V	• CH-1: PB RF Envelope • CH-2: Audio Output • RF Envelope Output Point • Audio Output Jack	• Play an alignment tape

Checking Procedure

1) Confirm that the period Ⓐ in Fig. C-9-1 is within ± ½ V.
2) If the result is abnormal, repeat adjustment #7. (X-Value adjustment)

V ┌ NTSC: 16.67msec
  └ PAL: 20msec

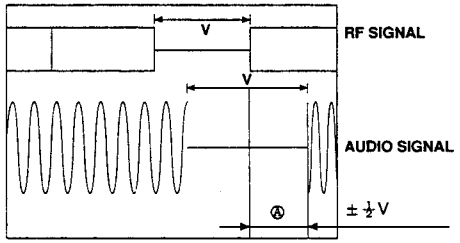


Fig. C-9-1

9-3. Check for tape curling or jamming

Test Equipment / Fixture	Specification	VCR(VCP) State
• T-160 Tape • T-120 Tape	• Be sure there is no tape jamming or curling at the begining, middle or end of a T-160 tape.	• Run the CUE, REV play mode at the beginning and the end of the tape.

Checking Procedure

1) Confirm that the tape runs smoothly around the roller guides, drum and A/C head assemblies while abruptly changing operating modes from Play to CUE or REV. This is to be checked at the begining, middle and end sections of the cassette.
2) Confirm that the tape passes over the A/C head assembly as indicated by proper audio reproduction and proper tape counter performance.

10. Maintenance/Inspection Procedure

1) Required Maintenance

The recording density of a VCR(VCP) is much higher than that of an audio tape recorder. VCR(VCP) components must be very precise, at tolerances of 1/1000mm, to ensure compatiblity with other VCRs. If any of these components are worn or dirty, the symptoms will be the same as if the part is defective. To ensure a good picture, periodic inspection and maintenance, including replacement of worn out parts and lubrication, is necessary.

2) Scheduled Maintenance

Schedules for maintenance and inspection are not fixed because they vary greatly according to the way in which the customer uses the VCR(VCP), and the environment in which the VCR(VCP) is used.
But, in general home use, a good picture will be maintained if inspection and maintenance is made every 1,000 hours. The table below shows the relation between time used and inspection period.

Table 1

When inspection is necessary / Average hours used per day	About 1 year	About 18 months	About 3 years
One hour	▼	▼	▼
Two hours			
Three hours			

3) Check before starting repairs

The following faults can be remedied by cleaning and oiling. Check the needed lubrication and the conditions of cleanliness in the unit.
Check with the customer to find out how often the unit is used, and then determine that the unit is ready for in spection and maintenance. Check the following parts.

Tabel 2

Phenomenon	Inspection
Poor S/N, no color	Dirt on video head or worn video head
Tape does not run or tape is slack	Dirt on pinch roller, belt or flywheel belt
Vertical jitter, horizontal jitter	Dirt on video head or in tape transport system
Color beats	Dirt on full-erase head
Low volume or distorted audio	Dirt on audio/control head
No Fast forward or rewind or rotation is slow	Dirt on belt

4) Supplies Required for Inspection and Maintenance

(1) Grease Kanto G-311G or equivalent
(2) Isopropyl Alcohol or equivalent
(3) Cleaning Patches

5) Maintenance Procedure

5-1) Cleaning

(1) Cleaning video head
First use a cleaning tape. If the dirt on the head is too stubborn to remove by tape, use the cleaning patch. Coat the cleaning patch with Isopropyl Alcohol. Touch the cleaning patch to the head tip and gently turn the head(rotating cylinder) right and left.
(Do not move the cleaning patch vertically. Make sure that only the buckskin on the cleaning patch comes into contact with the head. Otherwise, the head may be damaged.)
Thoroughly dry the head. Then run the test tape. If Isopropyl Alcohol remains on the video head, the tape may be damaged when it comes into contact with the head surface.
(2) Clean the tape transport system and drive system, etc, by wiping with a cleaning patch wetted with Isporopyl Alcohol.

NOTES:

① It is the tape transport system which comes into contact with the running tape. The drive system consists of those parts which moves the tape.
② Make sure that during cleaning you do not touch the tape transport system with the tip of a screw driver and no that force is that would cause deforming or damage applied to the system.

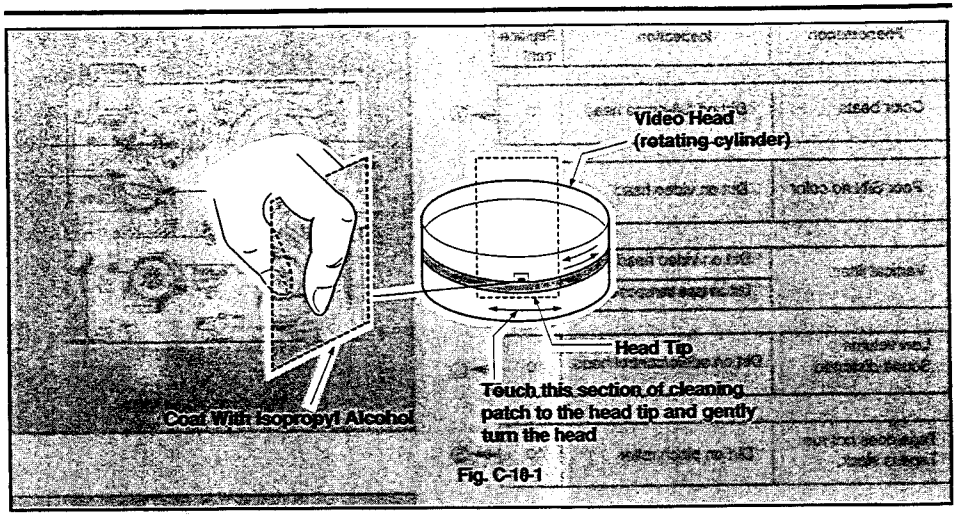


Fig. C-10-1

5-2) Greasing

(1) Greasing guidelines
Apply grease, with a cleaning patch. Do not use excess grease. It may come into contact with the tape transport or drive system. Wipe any excess and clean with cleaning patch wetted in Isopropyl Alcohol.
(2) Periodic greasing
Grease specified locations every 5,000 hours.

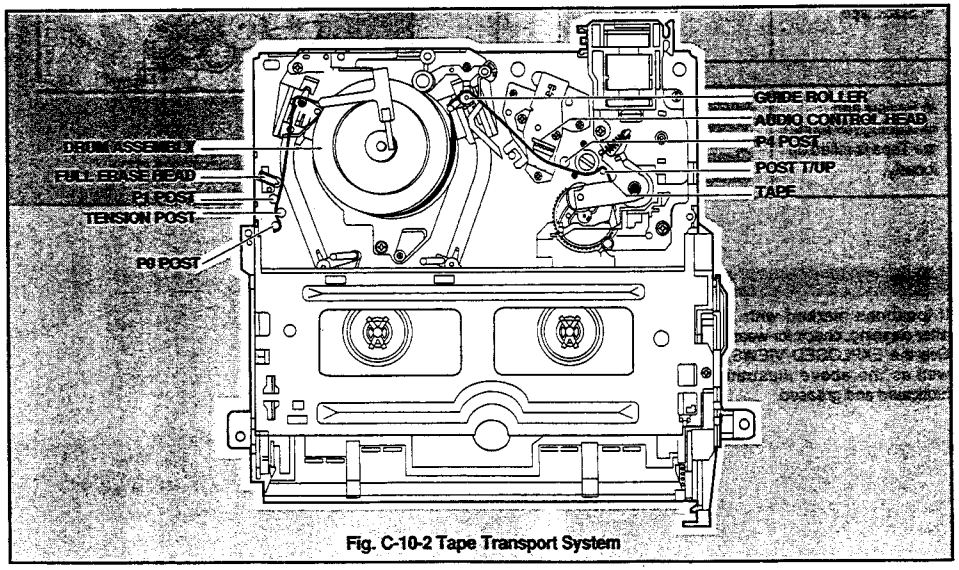


Fig. C-10-2 Tape Transport System

MECHANISM ADJUSTMENT

Phenomenon	Inspection	Replace-ment	
Color beats	Dirt on full-erase head	○	→①
Poor S/N no color	Dirt on video head	○	→②
Vertical jitter	Dirt on video head Dirt on tape transport system	○	→③
Low volume Sound distorted	Dirt on audio/control head	○	→④
Tape does not run. Tape is slack.	Dirt on pinch roller	○	→⑤

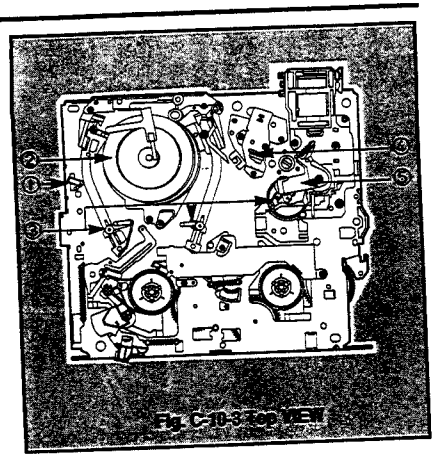


Fig. C-10-3 TOP VIEW

Phenomenon	Inspection	Replace-ment	
• No fast forward or rewind, or rotation is slow • Tape does not run • Slack tape	Dirt on reel belt	○	→⑥
In Review and Unloading (off mode), the Tape is rolled up loosely.	Clutch Ass'y S27 Torque reduced	○	→⑦
	Cleaning Drum and transport system		

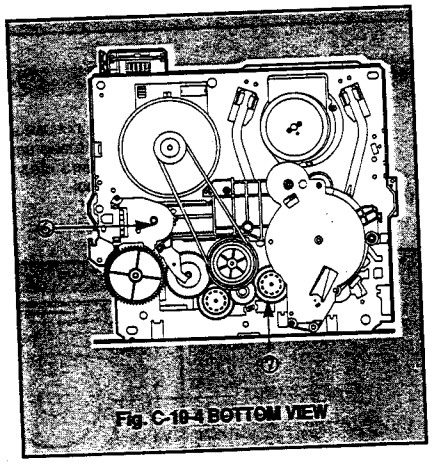


Fig. C-10-4 BOTTOM VIEW

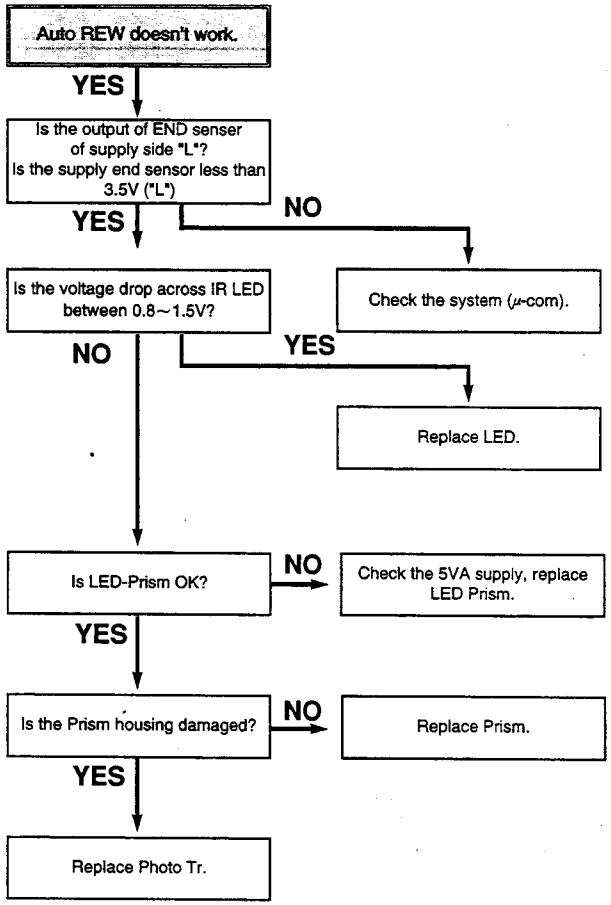
Note

If locations marked with ○ do not operate normally after cleaning, check for wear and replace.
See the EXPLODED VIEWS at the end of this manual as well as the above illustrations for the sections to be lubricated and greased.

MECHANISM TROUBLESHOOTING GUIDE

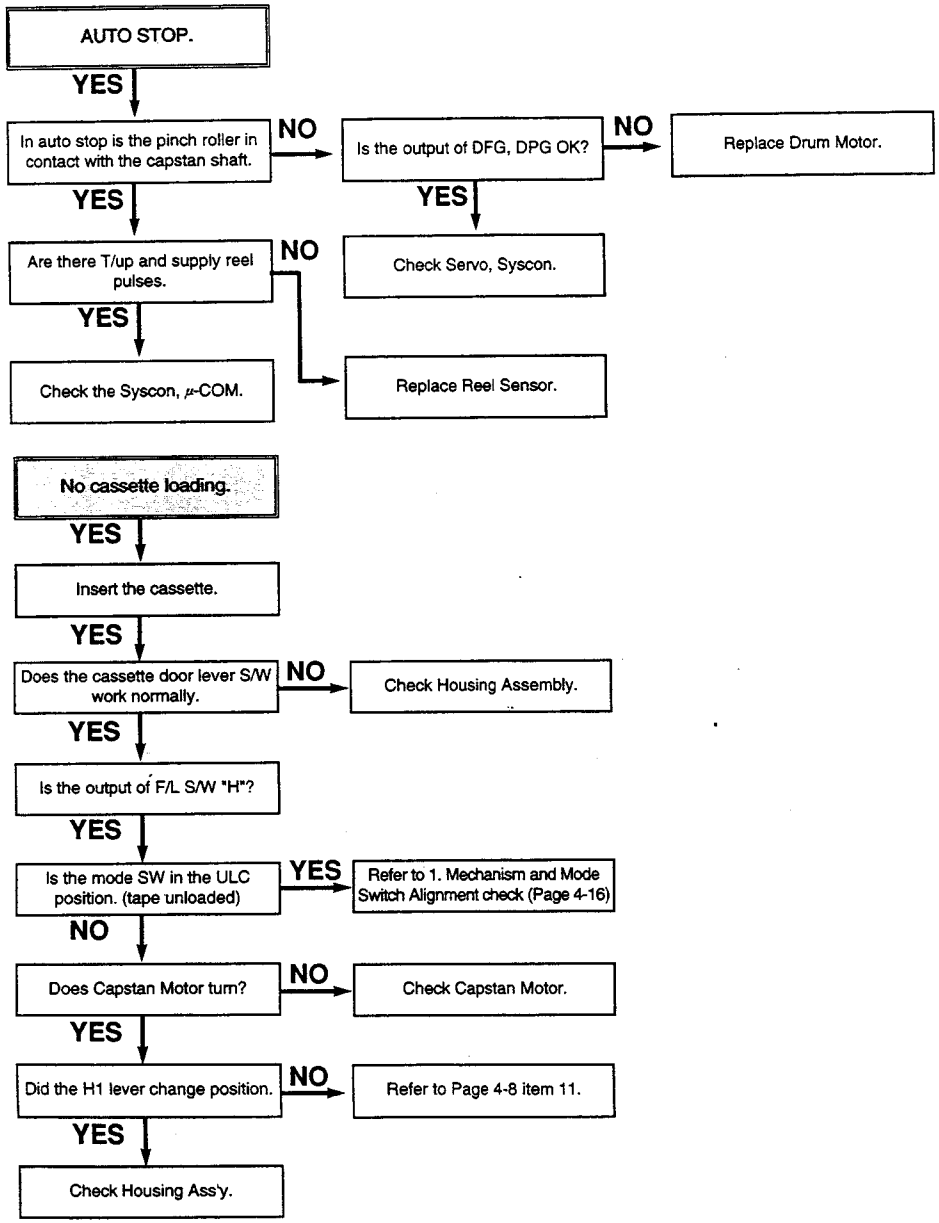
1.Deck Mechanism

A.

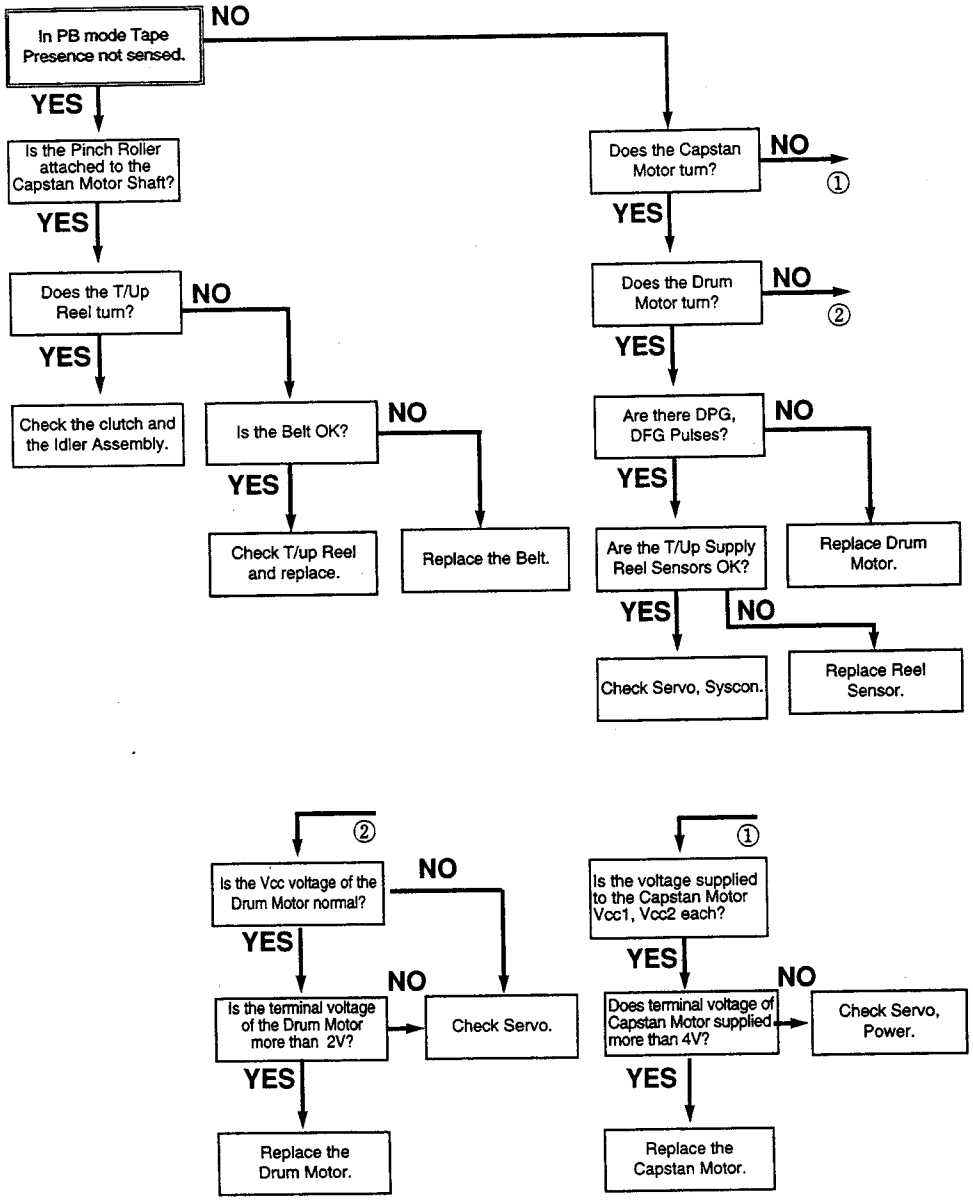


NOTES:

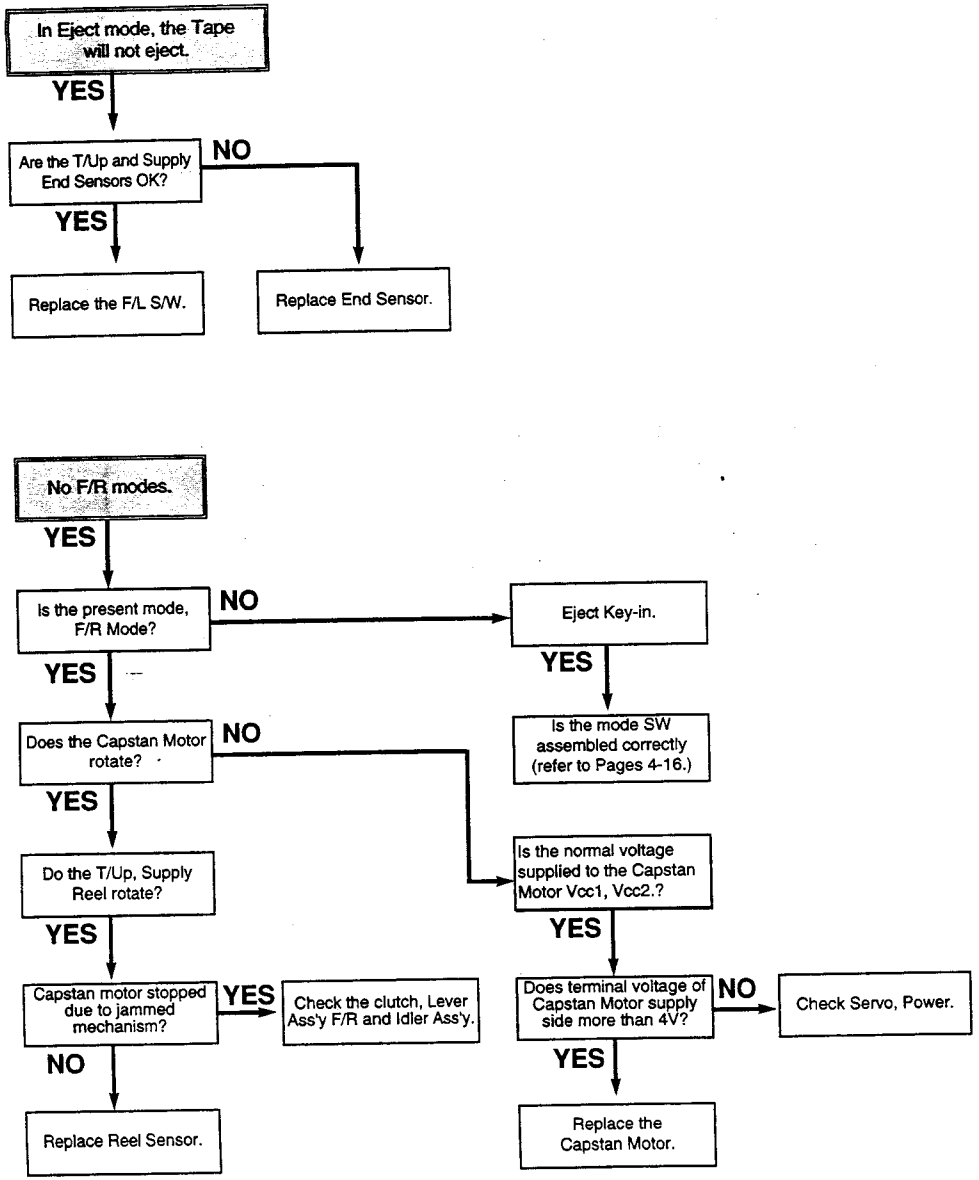
1) Auto REW takes place when the supply end sensor is "H" high.
2) "H"=voltage greater than 3.5V, "L"=voltage between 0.7~1.0V.


AUTO STOP.
YES
In auto stop is the pinch roller in contact with the capstan shaft.
NO
Is the output of DFG, DPG OK?
NO
Replace Drum Motor.
YES
YES
Are there T/up and supply reel pulses.
NO
Check Servo, Syscon.
YES
Check the Syscon, μ-COM.
Replace Reel Sensor.
No cassette loading.
YES
Insert the cassette.
YES
Does the cassette door lever S/W work normally.
NO
Check Housing Assembly.
YES
Is the output of F/L S/W "H"?
YES
Is the mode SW in the ULC position. (tape unloaded)
YES
Refer to 1. Mechanism and Mode Switch Alignment check (Page 4-16)
NO
Does Capstan Motor turn?
NO
Check Capstan Motor.
YES
Did the H1 lever change position.
NO
Refer to Page 4-8 item 11.
YES
Check Housing Ass'y.

D.

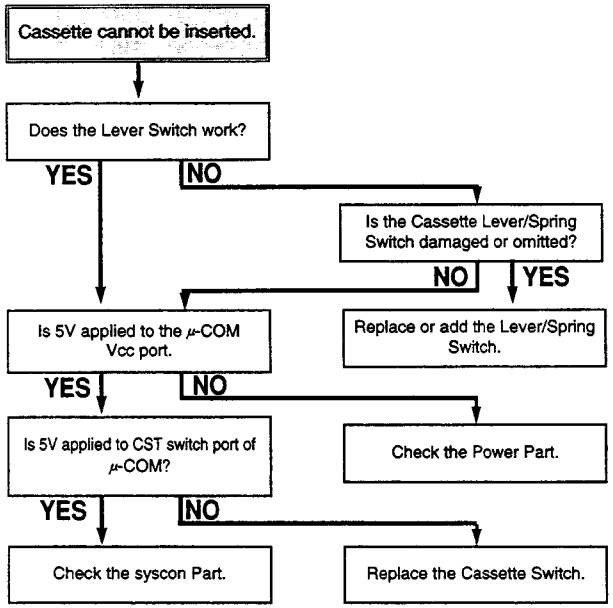

In PB mode Tape Presence not sensed.
NO
YES
Is the Pinch Roller attached to the Capstan Motor Shaft?
YES
Does the T/Up Reel turn?
NO
YES
Check the clutch and the Idler Assembly.
Is the Belt OK?
NO
YES
Check T/up Reel and replace.
Replace the Belt.
Does the Capstan Motor turn?
NO
①
YES
Does the Drum Motor turn?
NO
②
YES
Are there DPG, DFG Pulses?
NO
YES
Are the T/Up Supply Reel Sensors OK?
Replace Drum Motor.
YES
NO
Check Servo, Syscon.
Replace Reel Sensor.
②
Is the Vcc voltage of the Drum Motor normal?
NO
YES
Is the terminal voltage of the Drum Motor more than 2V?
NO
Check Servo.
YES
Replace the Drum Motor.
①
Is the voltage supplied to the Capstan Motor Vcc1, Vcc2 each?
YES
Does terminal voltage of Capstan Motor supplied more than 4V?
NO
Check Servo, Power.
YES
Replace the Capstan Motor.

E.

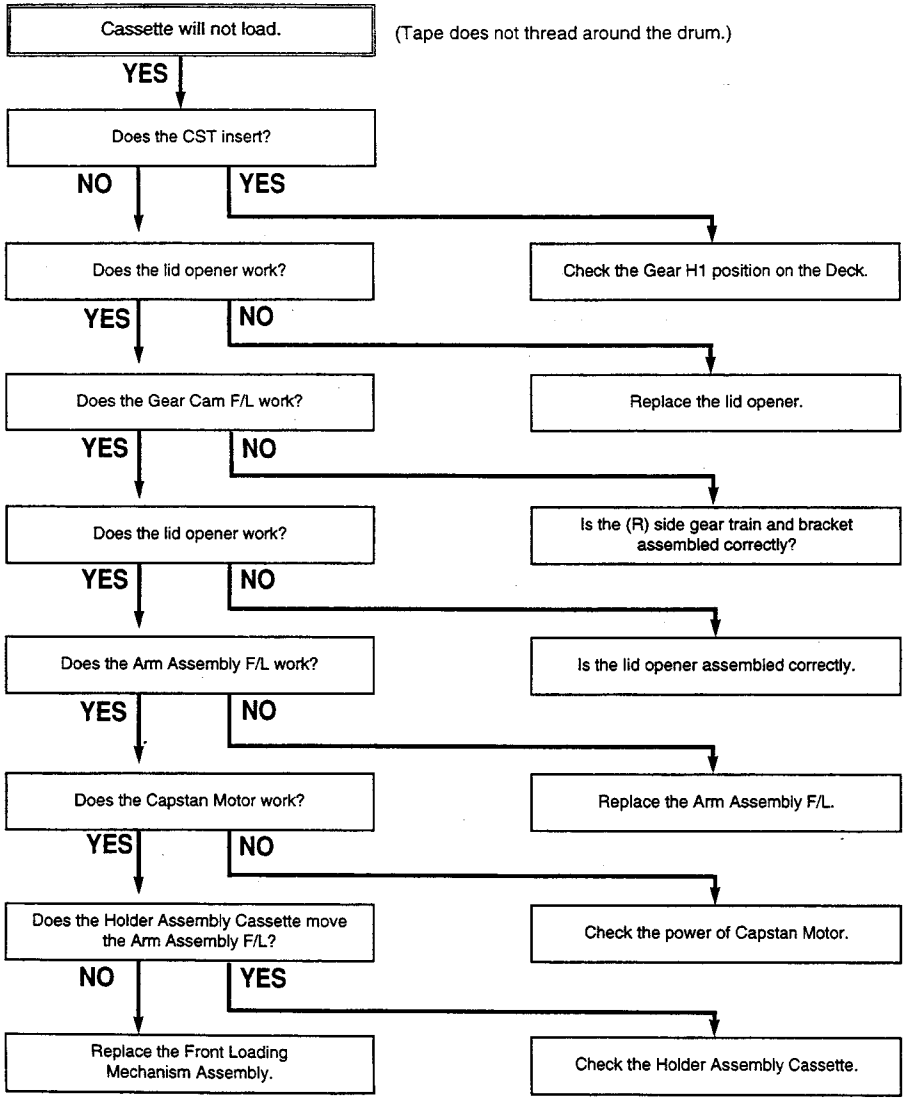


2. Front Loading Mechanism

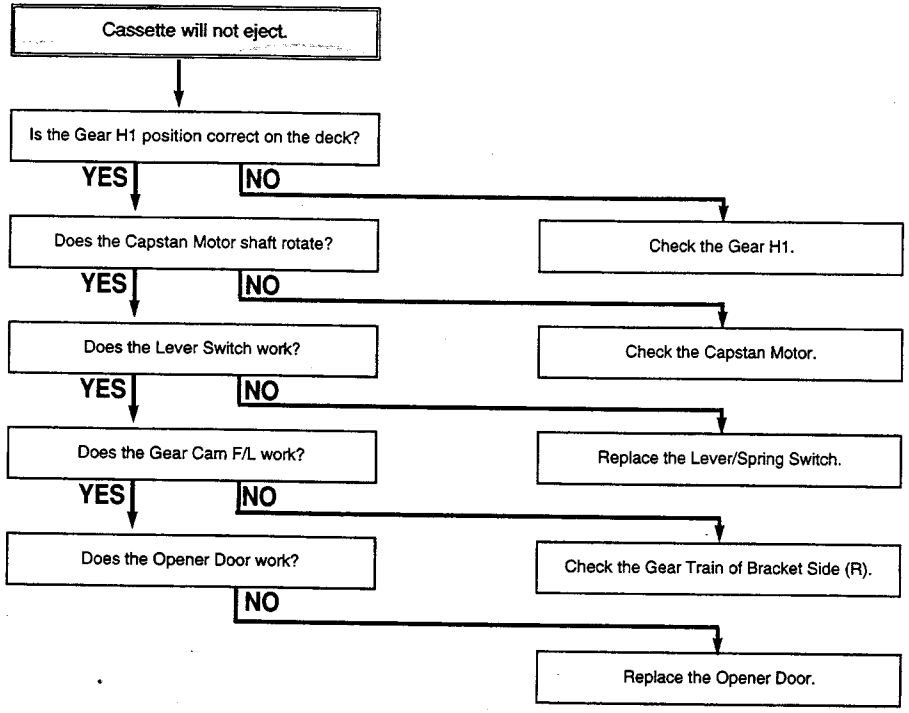
A.



B.


Cassette will not load.
(Tape does not thread around the drum.)
YES
Does the CST insert?
NO
YES
Does the lid opener work?
Check the Gear H1 position on the Deck.
YES
NO
Does the Gear Cam F/L work?
Replace the lid opener.
YES
NO
Does the lid opener work?
Is the (R) side gear train and bracket assembled correctly?
YES
NO
Does the Arm Assembly F/L work?
Is the lid opener assembled correctly.
YES
NO
Does the Capstan Motor work?
Replace the Arm Assembly F/L.
YES
NO
Does the Holder Assembly Cassette move the Arm Assembly F/L?
Check the power of Capstan Motor.
NO
YES
Replace the Front Loading Mechanism Assembly.
Check the Holder Assembly Cassette.

C.

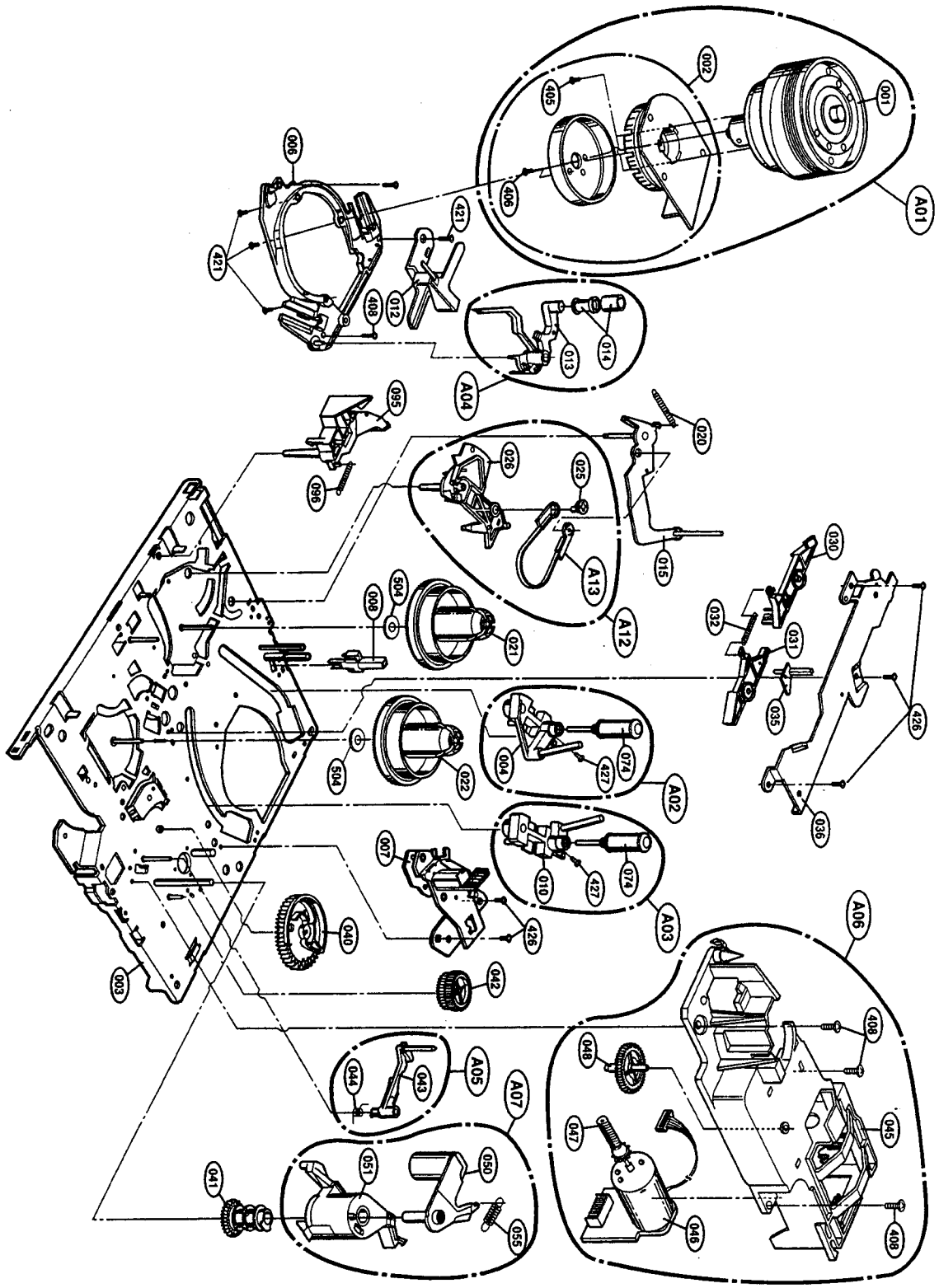

Cassette will not eject.
Is the Gear H1 position correct on the deck?
YES
NO
Does the Capstan Motor shaft rotate?
Check the Gear H1.
YES
NO
Does the Lever Switch work?
Check the Capstan Motor.
YES
NO
Does the Gear Cam F/L work?
Replace the Lever/Spring Switch.
YES
NO
Does the Opener Door work?
Check the Gear Train of Bracket Side (R).
NO
Replace the Opener Door.

EXPLODED VIEW

1. Moving Mechanism Section (1)

(Top View)

NOTE) · ○ marks the optional parts only in VCR (Video Cassette Recorder) Models.

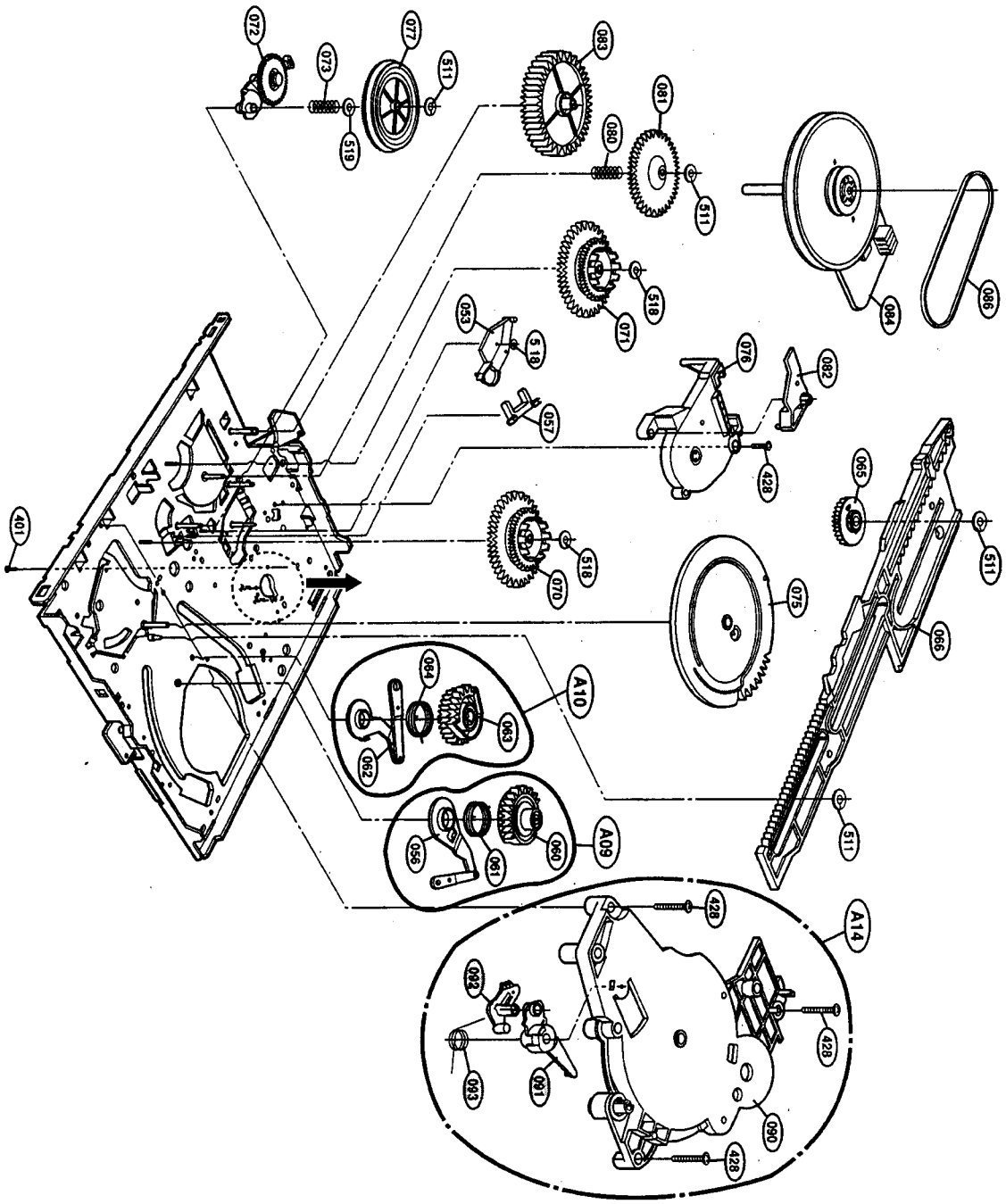


EXPLODED VIEW

2. Moving Mechanism Section (2)

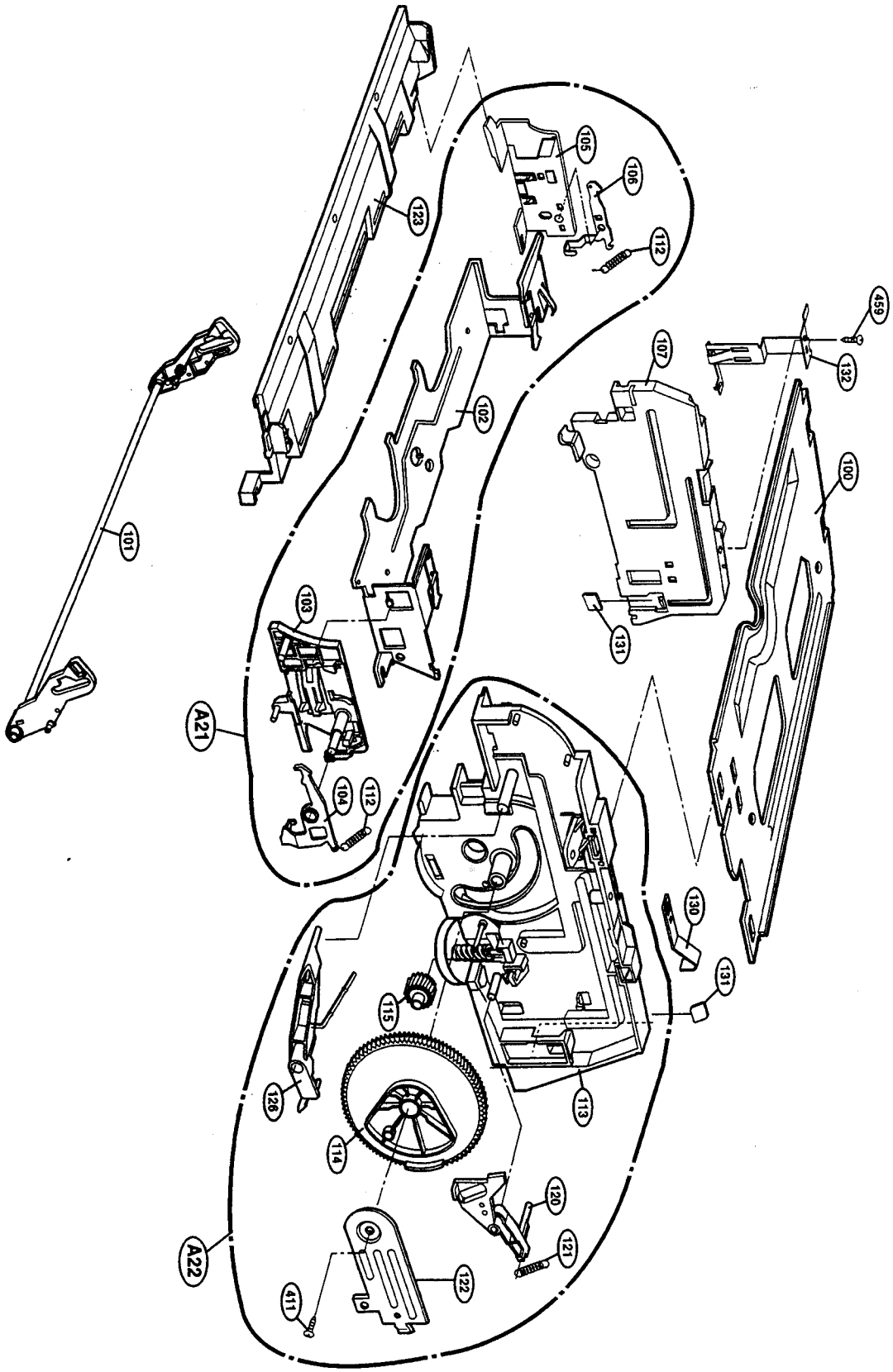
(Bottom View)

NOTE) . ◯ is the additional parts of the VCR (Video Cassette Recoder) Models.



EXPLODED VIEW

3. Front Loading Mechanism Section



SECTION 5 REPLACEMENT PARTS LIST

· Mechanical Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
				ASSEMBLY PARTS SECTION		
		A00	6721R-0050A	DECK ASSY	D-27U (P, 6HF, EP)	
		A01	6723R-0027G	DRUM ASSY	(3P6S)SUPER PAL D4HD+HIFI (11)	
		A02	225-361A	BASE	ASSY P2	
		A03	225-364A	BASE	ASSY P3	
		A04	386-394A	ARM	ASSY CLEANER	
		A05	386-405B	ARM	ASSY T/UP	
		A06	4811R-0004G	BRACKET ASSY	L/D MOTOR (D27U/AIWA)	
	OR	A07	340-070A	HOLDER	ASSY PINCH	
		A07	340-195A	HOLDER	ASSY PINCH	
		A09	435-435A	GEAR	ASSY P2	
		A10	435-437A	GEAR	ASSY P3	
		A12	333-329A	LEVER	ASSY TENSION	
		A13	328-075A	BAND	ASSY TENSION	NSP
		A14	4811R-0010B	BRACKET ASSY	CAM	
		A20	3661R-0001B	HOUSING ASSY (MECH)	D-27	
		A21	4931R-0004A	HOLDER ASSY	CST	
		A22	4811R-0002A	BRACKET ASSY	SIDE(R)	
				PARTS SECTION		
		001	6723R-0026G	DRUM ASSY	SUB(SUPER PAL D4HD+HIFI-11P)	
		002	414-209B	MOTOR	ASSY DRUM GVD-027B ALPS	
	OR	002	414-217B	MOTOR	ASSY DRUM E20XL20 D27 SANKYO	
		003	311-011A	CHASSIS ASSY'	D27	NSP
		004	225-362A	BASE	SUB ASSY P2	NSP
		006	225-376A	BASE	ASSY DRUM	
		007	225-371A	BASE	ASSY A/C	
		008	523-833A	HEAD	FE HVFHU0010AK ALPS	
		009	434-244A	ROLLER	ASSY INERTIA	
		010	225-365A	BASE	SUB ASSY P3	NSP
		012	225-399A	BASE	ASSY BRUSH	
		013	386-395A	ARM	CLEANER	NSP
		014	324-835B	HOLDER	ASSY CLEANER	NSP
		015	386-392A	ARM	ASSY TENSION	
		020	442-640A	SPRING	TENSION	
		021	456-070A	REEL	S27	
		022	456-071A	REEL	T27	
		025	340-008A	HOLDER	BAND(C)	NSP
		026	333-330A	LEVER	TENSION	NSP
		030	4421R-0002A	BRAKE ASSY	SUPPLY (U)	
		031	338-114B	BRAKE ASSY	T/UP (U)	
		032	442-655A	SPRING	MB	
		035	316-019A	BODY	PRISM LED	
		036	257-071A	PLATE	UP	
		040	435-441A	GEAR	PINCH CAM	
		041	435-440A	GEAR	PINCH	
		042	435-439A	GEAR	CNT	
		043	386-404B	ARM	SUB ASSY T/UP	
		044	442-650A	SPRING	T/UP	NSP

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		045	321-669A	BRACKET	L/D MOTOR	
		046	414-199G	MOTOR(MECH)	ASSY L/D(AIWA)	
		047	4422R-0001A	WORM	L/D MOTOR	
		048	437-020A	WORM	WHEEL	
		050	4261R-0002A	ARM ASSY!	PINCH (D/C)	
		051	340-073A	HOLDER	SUB ASSY PINCH	
		053	4510R-0010A	LEVER	F/R (U)	
		055	442-649A	SPRING	PINCH	NSP
		056	333-334A	LEVER	ASSY P2	NSP
		057	4260R-0007A	ARM	F/R	
		060	435-436A	GEAR	P2	NSP
		061	442-647A	SPRING	P2	NSP
		062	333-336A	LEVER	ASSY P3	NSP
		063	435-438A	GEAR	P3	NSP
		064	442-648A	SPRING	P3	NSP
		065	435-442A	GEAR	P/S	
		066	3300R-0123A	PLATE	SLIDER(U)	
		070	337-007B	CLUTCH	ASSY S27	
		071	337-008A	CLUTCH	ASSY T27	
		072	386-396A	ARM	ASSY IDLER	
		073	442-644A	SPRING	UP/D	
		074	434-173A	ROLLER	ASSY GUIDE	
	OR	074	434-173C	ROLLER	ASSY GUIDE	
	OR	074	434-173D	ROLLER	ASSY GUIDE(DAI YANG)	
		075	435-433A	GEAR	CAM L/D	
		076	556-252B	SWITCH	MODE S/W(D-27),HMW0840-01,HOSI	
		077	435-432C	GEAR	PULLEY	
		080	442-656A	SPRING	H1	
		081	435-443A	GEAR	H1	
		082	333-339A	LEVER	H1	
		083	435-444A	GEAR	H-2	
		084	4680RA0001C	MOTOR(MECH)	GVC-027UA CAPSTAN LGEC	
		086	452-062A	BELT	CAPSTAN D74.6XT2.1	
		090	4810R-0043A	BRACKET	CAM (B/T)	
		091	4510R-0008A	LEVER	JOG (W/O SPRING)	
		092	435-434A	GEAR	JOG	
		093	442-646A	SPRING	JOG	
		095	333-338A	LEVER	TAB	
		096	442-652A	SPRING	TAB	
		100	3300R-0032A	PLATE	TOP	
		101	386-407A	ARM	ASSY F/L	
		102	4930R-0013A	HOLDER	CST	NSP
		103	4930R-0012A	HOLDER	BRACKET(R)	NSP
		104	4510R-0002A	LEVER	STOPPER(R)	NSP
		105	4930R-0011A	HOLDER	BRACKET(L)	NSP
		106	4510R-0001A	LEVER	STOPPER(L)	NSP
		107	4810R-0005A	BRACKET	SIDE(L)	
		111	442-659A	SPRING	STOPPER	NSP
		112	442-660A	SPRING	RELEASE	NSP
		113	4810R-0006A	BRACKET	SIDE(R)	NSP
		114	435-467A	GEAR	CAM F/L	NSP
		115	435-466A	GEAR	CONNECT	NSP
		120	333-342A	LEVER	SWITCH	NSP
		121	442-661A	SPRING	SWITCH	NSP
		122	3300R-0006A	PLATE	COVER	NSP

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		123	4974R-0006A	GUIDE	CST	
		126	465-040A	OPENER	DOOR	NSP
		130	257-075A	PLATE	GROUND	NSP
		131	257-106A	PLATE	REFLECTOR	NSP
		132	3300R-0033A	PLATE	GROUND(L)	NSP
SCREW						
		401	1MPK0261718	SCREW MACHINE,PAN HEAD	+,- D2.6 L5.0 MSWR3/FZY	
		405	1MDC0262818	PAN HEAD MACHINE SCREW P/WASH+	D2.6 L12 MSWR3/FZY	
		406	1MEC0302018	PAN HEAD MACHINE SCREW S/W +	D 3.0 L 6.0 MSWR3/FZY	
		408	1MBC0302418	BINDING HEAD MACHINE SCREW +	D 3.0 L 8.0 MSWR3/FZY	
		411	353-046B	SCREW	SPECIAL (3X8 FZMY)	
		421	1MPC0302618	PAN HEAD MACHINE SCREW +!	D3.0 L10.0,MSWR3/FZY	
		426	1MPC0302018	PAN HEAD MACHINE SCREW +!	D 3.0 L 6.0 MSWR3/FZY	
		427	353-054B	SCREW	MINIATURE	
		428	353-221A	SCREW	M3-L15	
		429	353-046A	SCREW	SPECIAL (3X6 FZMY)	
NUT, WASHER						
		504	354-001B	WASHER	P.S D3.1XD6X0.5T	
		511	354-080C	WASHER	STOPPER	
		518	354-128A	WASHER	STOPPER	
		519	354-128B	WASHER	STOPPER	

· Cabinet & Main Frame Section

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
ASSEMBLY PARTS SECTION						
		A41	3501R-1062A	BOARD ASSY	KEY BOARD	
		A42	3501R-1061F	BOARD ASSY	TIMER	
		A43	3721R-F024K	PANEL ASSY,FRONT[NORMAL PARTS]	S909LP 3GL1L	
		A44	3501R-1064A	BOARD ASSY	PRE-AMP	
		A45	3501R-1063A	BOARD ASSY	SMPS	
		A46	3501R-1057E	BOARD ASSY	MAIN(S909LP)	
		A47	6871R-1059B	PWB(PCB) ASSY	Y/CBOARD	
		A49	6871R-1060A	PWB(PCB) ASSY	MPX BOARD	
PARTS SECTION						
		250	3110R-0030A	CASE	TOP	
		260	3210R-0009B	FRAME	MAIN	NSP
		261	4930R-0023A	HOLDER	TUNER	
		262	4940R-V003A	KNOB	VOLUME	
		263	4940R-Z004B	KNOB	SHUTTLE(UVP-H396G)	
		264	4940R-Z003B	KNOB	JOG(UVP-H396G)	
		275	4930R-0024A	HOLDER	DIGITRON	
		280	3720R-F020B	PANEL	FRONT	NSP
		281	3551R-0007H	COVER ASSY	DOOR	NSP
		283	3580R-0022T	DOOR	CST	

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		284	442-681A	SPRING	DOOR	
		300	6410RCL002B	POWER CORD	DW5000E(FILTER) DONGWON VDE 21	
		320	3721R-D015D	PANEL ASSY,DISTRIBUTOR[NORMAL		
		330	3550R-0159A	COVER	BOTTOM	
				SCREW		
		452	353-051A	SCREW	SPECIAL	
		462	353-136A	SCREW	SPECIAL(FBK) (353S353A)	
		463	1MBC0302418	BINDING HEAD MACHINE SCREW +	D 3.0 L 8.0 MSWR3/FZY	
		472	353-051E	SCREW	SPECIAL (3X12)	

· Packing Accessory Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		801	3835RP0031H	INSTRUCTION ASSY	S909LP 3GL1L	
		802	3890R-H125A	BOX	S909LP 3GL1L SW3-A 1.095 2 FLX	
		803	3920R-0063A	PACKING	0.02 107 EPS 10 768 1596	
	OR	804	292-053B	BAG	SOFT(MIDI)	NSP
		804	3858R-0006A	SHEET	ROLL(W630XL300MX0.5T)	NSP
		806	861-033B	CABLE SET ASSY	RF-CABLE ASSY FTZ (D.D)	
		808	534-008C	BATTERY	AAAM(R03) 1.5V 1PAIR(LOCAL)	
		810	861-505K	CABLE SET ASSY	RF-CABLE ASSY PAL HI-FI FTZ	
		811	564-017B	PLUG ASSY	PHONO CORD 1WAY (YL)	
		812	564-018B	PLUG ASSY	PHONO CORD 2WAY (RD/WH)	
		813	683-002B	CABLE	S-VHS CORD SUAHN	
		821	861-045C	CABLE,COAXIAL	SCART+SCART CABLE (DONGDO)	
		825	453-100K	TAPE (CIRC)	S-VHS TAPE(PAL E-180)	

· Remote Control Section

RUN DATE : 98.11.19
NSP: Not Service Part

S	AL	LOCA.NO	PART NO(GS)	DESCRIPTION	SPECIFICATION	REMARKS
		900	6711R2P004A	REMOTE CONTROLLER ASSY	J4	

· Electrical Section

RUN DATE : 98.11.19

CAUTION: The * marks in the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the SAFETY PRECAUTIONS and SERVICING PRECAUTIONS in the manual. Do not degrade the safety of the unit through improper servicing.

Tolerance

Symbol	C	J	K	M	N	Z	P	A
%	±2	±5	±10	±20	±30	+80 -20	+100 -10	+100 -10

CC, CJ, CK: Capacitor, Ceramic
CE: Capacitor, Electrolytic
CQ: Capacitor, Polyester

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
				CAPACITOR
		C001	0CN1030F678	0.01M 16V M Y TA26
		C002	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C003	0CN1030F678	0.01M 16V M Y TA26
		C004	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C005	0CN1030F678	0.01M 16V M Y TA26
		C006	0CN1040K948	0.1UF 50V Z F TA26 D
		C007	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C008	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C009	0CN1030F678	0.01M 16V M Y TA26
		C010	0CN6810K518	680P 50V K B TA26
		C011	0CN6810K518	680P 50V K B TA26
		C012	0CN1030F678	0.01M 16V M Y TA26
		C013	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C014	0CN1030F678	0.01M 16V M Y TA26
		C015	0CN3310K518	330P 50V K B TA26
		C016	0CN1030F678	0.01M 16V M Y TA26
		C101	0CQ4732K409	0.047UF S 50V J PE TP
		C102	0CQ4732K409	0.047UF S 50V J PE TP
		C103	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C104	0CN1030F678	0.01M 16V M Y TA26
		C105	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C106	0CK1030K945	0.01UF 50V Z F TR
		C151	0CN1010K518	100P 50V K B TA26
		C152	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C153	0CN1030F678	0.01M 16V M Y TA26
		C154	0CE1054K636	1.0U SRA 50V M FM5 BP TP(D)
		C155	0CQ6822K409	6800PF S 50V J PE TP
		C156	0CN2230H948	0.022M 25V Z F TA26
		C157	0CC3300K415	33P 50V J NP0 TP
		C158	0CC2200K415	22P 50V J NP0 TS
		C159	0CE1044K638	0.1M SRA 50V M FM5 TP(5)
		C160	0CN5610K518	560P 50V K B TA26
		C161	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C162	0CN1030F678	0.01M 16V M Y TA26
		C163	0CX1200K408	12P 50V J SL TA26
		C164	0CX1000K408	10P 50V J SL TA26
		C165	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C166	0CN1010K518	100P 50V K B TA26
		C167	0CN1030F678	0.01M 16V M Y TA26
		C168	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C169	0CN1040K948	0.1UF 50V Z F TA26 D
		C170	0CN1040K948	0.1UF 50V Z F TA26 D
		C171	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		C172	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C174	0CN1030F678	0.01M 16V M Y TA26
		C175	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C176	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C180	0CX5600K408	56P 50V J SL TA26
		C181	0CN1020K518	1000P 50V K B TA26
		C182	0CX1200K408	12P 50V J SL TA26
		C183	0CX2700K408	27P 50V J SL TA26
		C184	0CX4700K408	47P 50V J SL TA26
		C201	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C202	0CN1030F678	0.01M 16V M Y TA26
		C206	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C207	0CN1030F678	0.01M 16V M Y TA26
		C208	0CE1064K638	10M SRA 50V M FM5 TP(5)
		C209	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C210	0CN2230H948	0.022M 25V Z F TA26
		C213	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C214	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C215	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C216	0CN1030F678	0.01M 16V M Y TA26
		C217	0CE4753K638	4.7M SRE 50V M FM5 TP(5)
		C218	0CN1030F678	0.01M 16V M Y TA26
		C219	0CN1510K518	150P 50V K B TA26
		C221	0CN1020K518	1000P 50V K B TA26
		C222	0CN1020K518	1000P 50V K B TA26
		C223	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C224	0CN1040K948	0.1UF 50V Z F TA26 D
		C301	0CH4101K416	100P 50V J NP0 2.0*1.25 R/TP
		C302	0CH4101K416	100P 50V J NP0 2.0*1.25 R/TP
		C303	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C304	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C305	0CH1123K516	0.0120UF 50V K B(5YP) 2012 R/T
		C306	0CE4754K638	4.7M SRA 50V M FM5 TP(5)
		C307	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C308	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C309	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C310	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C312	0CH4360K416	36PF 50V J NP0 2012 R/TP
		C313	0CE1044K638	0.1M SRA 50V M FM5 TP(5)
		C314	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C315	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C316	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C317	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C319	0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP
		C320	0CE2254K638	2.2M SRA 50V M FM5 TP(5)

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		C321	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C322	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C323	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C324	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C325	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C326	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C327	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C328	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C329	0CH1473K516	0.047U 50V K X7R 2.0X1.2 R/TP
		C330	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C331	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C332	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C333	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C334	0CE3344K638	0.33M SRA 50V M FM5 TP(5)
		C335	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C336	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C337	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C338	0CH4120K416	12P 50V NPO 2.0X1.25 R/TP
		C339	0CE1044K638	0.1M SRA 50V M FM5 TP(5)
		C340	0CH4331K416	330P 50V J NP0 2.0X1.2 R/TP
		C341	0CH4121K416	120P 50V J NP0 2.0X1.2 R/TP
		C342	0CH4270K416	27P 50V J COG 2.0X1.2 R/TP
		C343	0CH4150K416	15P 50V J COG 2.0X1.2 R/TP
		C344	0CH4121K416	120P 50V J NP0 2.0X1.2 R/TP
		C345	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C346	0CH4100K416	10PF 50V J NP0 2012 R/TP
		C347	0CH4151K416	150P 50V J NP0 2.0X1.2 R/TP
		C348	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C349	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C350	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C351	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C352	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C353	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C354	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C355	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C356	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C357	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C358	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C359	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C360	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C361	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C362	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C363	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C364	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C365	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C366	0CH4331K416	330P 50V J NP0 2.0X1.2 R/TP
		C367	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C368	0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP
		C369	0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP
		C370	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C371	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C372	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C373	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C374	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C375	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C376	0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP
		C377	0CH4101K416	100P 50V J NP0 2.0*1.25 R/TP
		C378	0CH4680K416	68P 50V J COG 2.0X1.2 R/TP
		C379	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C380	0CH4270K416	27P 50V J COG 2.0X1.2 R/TP
		C381	0CH4330K416	33P 50V J C 2.0X1.2 R/TP
		C382	0CH4180K416	18P 50V J C 2.0X1.2 R/TP

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		C383	0CH4180K416	18P 50V J C 2.0X1.2 R/TP
		C384	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C385	0CH4101K416	100P 50V J NP0 2.0*1.25 R/TP
		C386	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C387	0CH4390K416	39P 50V J COG 2.0X1.2 R/TP
		C388	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C389	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C390	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C391	0CH4220K416	22P 50V J NP0 2.0X1.25 R/TP
		C392	0CH4150K416	15P 50V J COG 2.0X1.2 R/TP
		C393	0CH4330K416	33P 50V J C 2.0X1.2 R/TP
		C394	0CH4680K416	68P 50V J COG 2.0X1.2 R/TP
		C395	0CH4150K416	15P 50V J COG 2.0X1.2 R/TP
		C396	0CH4150K416	15P 50V J COG 2.0X1.2 R/TP
		C397	0CH1223H516	0.022U 25V K B 2.0X1.25 R/TP
		C398	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C399	0CH4820K416	82P 50V J COG 2.0X1.2 R/TP
		C3A1	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C3A2	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C3A3	0CH1473K516	0.047U 50V K X7R 2.0X1.2 R/TP
		C3A4	0CH4560K416	56P 50V J NP0 2.0X1.25 R/TP
		C3A5	0CH4101K416	100P 50V J NP0 2.0*1.25 R/TP
		C3A6	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C3A7	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C3A8	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C3A9	0CE4754K638	4.7M SRA 50V M FM5 TP(5)
		C3B1	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C3B2	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C3B3	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C3B4	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C3B5	0CH4271K416	270P 50V J COG 2.0X1.2 R/TP
		C3B6	0CH4270K416	27P 50V J COG 2.0X1.2 R/TP
		C3B7	0CH4270K416	27P 50V J COG 2.0X1.2 R/TP
		C3B8	0CH4271K416	270P 50V J COG 2.0X1.2 R/TP
		C3B9	0CH4221K416	220P 50V J 2.0X1.25 R/TP
		C3C1	0CH4820K416	82P 50V J COG 2.0X1.2 R/TP
		C3C2	0CH4271K416	270P 50V J COG 2.0X1.2 R/TP
		C3C3	0CH4101K416	100P 50V J NP0 2.0*1.25 R/TP
		C3C4	0CH4181K416	180P 50V J NP0 2.0*1.25 R/TP
		C3C5	0CH4271K416	270P 50V J COG 2.0X1.2 R/TP
		C3C6	0CH4270K416	27P 50V J COG 2.0X1.2 R/TP
		C3C7	0CH4271K416	270P 50V J COG 2.0X1.2 R/TP
		C3C8	0CH4101K416	100P 50V J NP0 2.0*1.25 R/TP
		C3C9	0CH4270K416	27P 50V J COG 2.0X1.2 R/TP
		C3D1	0CH4330K416	33P 50V J C 2.0X1.2 R/TP
		C3D2	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C3D3	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C3D4	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C3D5	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C3D6	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C3D7	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C3D8	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C3D9	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C401	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C402	0CH4080K116	8P 50V D NP0 2.0X1.25 R/TP
		C403	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C404	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C405	0CH4102K406	1000P 50V J SL 2.0X1.2 R/TP
		C406	0CE4754K638	4.7M SRA 50V M FM5 TP(5)
		C407	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C408	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C409	0CH4050K016	5P 50V C COG 2.0X1.2 R/TP

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		C410	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C411	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C412	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C413	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C414	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C415	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C416	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C417	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C418	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C419	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C420	0CH4080K116	8P 50V D NP0 2.0X1.25 R/TP
		C421	0CH4100K416	10PF 50V J NP0 2012 R/TP
		C422	0CH4390K416	39P 50V J COG 2.0X1.2 R/TP
		C423	0CH4430K416	43PF 50V J NP0 2012 R/TP
		C424	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C425	0CH4100K416	10PF 50V J NP0 2012 R/TP
		C426	0CH4080K116	8P 50V D NP0 2.0X1.25 R/TP
		C427	0CH4390K416	39P 50V J COG 2.0X1.2 R/TP
		C428	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C429	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C430	0CH4330K416	33P 50V J C 2.0X1.2 R/TP
		C431	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C432	0CH4080K116	8P 50V D NP0 2.0X1.25 R/TP
		C433	0CH4100K416	10PF 50V J NP0 2012 R/TP
		C434	0CH4390K416	39P 50V J COG 2.0X1.2 R/TP
		C435	0CH4330K416	33P 50V J C 2.0X1.2 R/TP
		C436	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C437	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C438	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C439	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C440	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C441	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C442	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C443	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C444	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C445	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C447	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C448	0CE3354K638	3.3M SRA 50V M FM5 TP(5)
		C449	0CH4120K416	12P 50V NPO 2.0X1.25 R/TP
		C450	0CH4330K416	33P 50V J C 2.0X1.2 R/TP
		C451	0CH4060K116	6PF 50V D NP0 2012 R/TP
		C452	0CH4100K416	10PF 50V J NP0 2012 R/TP
		C453	0CE1044K638	0.1M SRA 50V M FM5 TP(5)
		C454	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C459	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C460	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C461	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C462	0CH4100K416	10PF 50V J NP0 2012 R/TP
		C463	0CH4060K116	6PF 50V D NP0 2012 R/TP
		C464	0CH4330K416	33P 50V J C 2.0X1.2 R/TP
		C465	0CH4120K416	12P 50V NPO 2.0X1.25 R/TP
		C466	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C467	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C468	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C469	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C470	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C472	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C473	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C474	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C475	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C476	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C477	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP

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		C478	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C479	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C480	0CH4470K416	47P 50V J NP0 2.0X1.25 R/TP
		C484	0CH1104K946	0.1UF 50V Z Y5V(F) 2012 R/TP
		C485	0CH1103K516	0.01U 50V K B 2.0X1.25 R/TP
		C487	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C490	0CH4180K416	18P 50V J C 2.0X1.2 R/TP
		C501	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C502	0CN1040K948	0.1UF 50V Z F TA26 D
		C503	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C504	0CN2230H948	0.022M 25V Z F TA26
		C505	0CN5610K518	560P 50V K B TA26
		C506	0CN2230H948	0.022M 25V Z F TA26
		C507	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C508	0CN1030F678	0.01M 16V M Y TA26
		C509	0CN1030F678	0.01M 16V M Y TA26
		C510	0CE4754K638	4.7M SRA 50V M FM5 TP(5)
		C511	0CN1040K948	0.1UF 50V Z F TA26 D
		C512	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C513	0CE4764H638	47M SRA 25V M FM5 TP(5)
		C514	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C515	0CK1030K945	0.01UF 50V Z F TR
		C516	0CK1040K945	0.1M 50V Z F TS
		C517	0CK2230K945	0.022M 50V Z F TS
		C521	0CN1030F678	0.01M 16V M Y TA26
		C522	0CN1030F678	0.01M 16V M Y TA26
		C524	0CN2230H948	0.022M 25V Z F TA26
		C525	0CN1810K518	180P 50V K B TA26
		C526	0CN2230H948	0.022M 25V Z F TA26
		C527	0CE3364F638	33M SRA 16V M FM5 TP(5)
		C528	0CN1220F668	1200P 16V M X TA26
		C529	0CN6810K518	680P 50V K B TA26
		C530	0CC1800K415	18P 50V J NP0 TS
		C531	0CC1800K415	18P 50V J NP0 TS
		C532	0CC1500K415	15P 50V J NP0 TS
		C533	0CC1500K415	15P 50V J NP0 TS
		C534	0CN2230H948	0.022M 25V Z F TA26
		C535	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C536	0CN1040K948	0.1UF 50V Z F TA26 D
		C537	0CN1030F678	0.01M 16V M Y TA26
		C539	0CN1030F678	0.01M 16V M Y TA26
		C541	0CN1040K948	0.1UF 50V Z F TA26 D
		C548	0CK1020K515	1000P 50V K B TS
		C551	0CN1020K518	1000P 50V K B TA26
		C552	0CN2230H948	0.022M 25V Z F TA26
		C553	0CN1020K518	1000P 50V K B TA26
		C555	0CN2720F668	2700P 16V M X TA26
		C556	0CE4763F638	47M SRE 16V M FM5 TP(5)
		C557	0CN1020K518	1000P 50V K B TA26
		C559	0CN1020K518	1000P 50V K B TA26
		C567	0CN1030F678	0.01M 16V M Y TA26
		C568	0CN1030F678	0.01M 16V M Y TA26
		C569	0CQ4732K409	0.047UF S 50V J PE TP
		C570	0CQ3332K409	0.033UF S 50V J PE TP
		C572	0CN1040K948	0.1UF 50V Z F TA26 D
		C580	0CN1030F678	0.01M 16V M Y TA26
		C601	0CN1040K948	0.1UF 50V Z F TA26 D
		C602	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C603	0CX1000K408	10P 50V J SL TA26
		C604	0CX1000K408	10P 50V J SL TA26
		C605	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C606	0CN1040K948	0.1UF 50V Z F TA26 D

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		C607	0CN1040K948	0.1UF 50V Z F TA26 D
		C608	0CX1000K408	10P 50V J SL TA26
		C609	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C610	0CE2244K638	0.22M SRA 50V M FM5 TP(5)
		C611	0CX1000K408	10P 50V J SL TA26
		C612	0CN1040K948	0.1UF 50V Z F TA26 D
		C613	0CN1040K948	0.1UF 50V Z F TA26 D
		C614	0CN1040K948	0.1UF 50V Z F TA26 D
		C615	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C616	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C617	0CN3910K518	390P 50V K B TA26
		C618	0CN1030F678	0.01M 16V M Y TA26
		C619	0CN1030F678	0.01M 16V M Y TA26
		C620	0CE3344K638	0.33M SRA 50V M FM5 TP(5)
		C621	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C622	0CN2230H948	0.022M 25V Z F TA26
		C623	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C624	0CN2230H948	0.022M 25V Z F TA26
		C625	0CN1030F678	0.01M 16V M Y TA26
		C626	0CN1220F668	1200P 16V M X TA26
		C627	0CN1010K518	100P 50V K B TA26
		C628	0CN3310K518	330P 50V K B TA26
		C629	0CN1030F678	0.01M 16V M Y TA26
		C630	0CX6800K408	68P 50V J SL TA26
		C631	0CX1800K408	18P 50V J SL TA26
		C632	0CN1510K518	150P 50V K B TA26
		C633	0CN1030F678	0.01M 16V M Y TA26
		C634	0CX2200K408	22P 50V J SL TP26
		C635	0CN1030F678	0.01M 16V M Y TA26
		C636	0CN1030F678	0.01M 16V M Y TA26
		C637	0CN1030F678	0.01M 16V M Y TA26
		C638	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C639	0CN1510K518	150P 50V K B TA26
		C640	0CN1030F678	0.01M 16V M Y TA26
		C641	0CN1510K518	150P 50V K B TA26
		C642	0CN1020K518	1000P 50V K B TA26
		C643	0CN3310K518	330P 50V K B TA26
		C645	0CN1030F678	0.01M 16V M Y TA26
		C646	0CN1040K948	0.1UF 50V Z F TA26 D
		C647	0CN1030F678	0.01M 16V M Y TA26
		C648	0CN3910K518	390P 50V K B TA26
		C649	0CN1040K948	0.1UF 50V Z F TA26 D
		C650	0CN1030F678	0.01M 16V M Y TA26
		C701	0CE4754K638	4.7M SRA 50V M FM5 TP(5)
		C702	0CN1020K518	1000P 50V K B TA26
		C703	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C704	0CN1030F678	0.01M 16V M Y TA26
		C705	0CN1040K948	0.1UF 50V Z F TA26 D
		C706	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C707	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C709	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C711	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C712	0CK1030K945	0.01UF 50V Z F TR
		C713	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C714	0CQ1032K409	0.01UF S 50V J PE TP
		C715	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C716	0CQ1522K409	1500PF S 50V J PE TP
		C717	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C718	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C719	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C720	0CN1030F678	0.01M 16V M Y TA26
		C721	0CE2264F638	22M SRA 16V M FM5 TP(5)

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		C722	0CN1040K948	0.1UF 50V Z F TA26 D
		C723	0CN1040K948	0.1UF 50V Z F TA26 D
		C732	0CX2400K408	24P 50V J SL TA26
		C733	0CX4700K408	47P 50V J SL TA26
		C735	0CK1030K945	0.01UF 50V Z F TR
		C736	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C737	0CN1030F678	0.01M 16V M Y TA26
		C751	0CN1010K518	100P 50V K B TA26
		C752	0CN2230H948	0.022M 25V Z F TA26
		C753	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C754	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C755	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C756	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C757	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C758	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C759	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C760	0CC4700K415	47P 50V J NP0 TP
		C761	0CQ3921N409	0.0039U 100V J POLY TP
		C762	0CN1040K948	0.1UF 50V Z F TA26 D
		C763	0CQ1031N409	0.01UF 100V J PE TP
		C764	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C767	0CQ1232K409	0.012U S 50V J TS TP
		C768	0CQ1232K409	0.012U S 50V J TS TP
		C769	0CN2230H948	0.022M 25V Z F TA26
		C770	0CN2230H948	0.022M 25V Z F TA26
		C771	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C772	0CN2210K518	220P 50V K B TA26
		C815	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C816	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C817	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C818	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C819	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C820	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C821	0CQ4722K409	0.0047U S 50V J TS TP
		C822	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C823	0CN1040K948	0.1UF 50V Z F TA26 D
		C824	0CQ2232K409	0.022UF S 50V J PE TP
		C825	0CQ4722K409	0.0047U S 50V J TS TP
		C826	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C827	0CQ1532K409	0.015UF S 50V J PE TP
		C828	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C829	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C830	0CN1030F678	0.01M 16V M Y TA26
		C831	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C832	0CQ1022K409	1000PF S 50V J PE TP
		C833	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C834	0CN2720F668	2700P 16V M X TA26
		C835	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C836	0CN1040K948	0.1UF 50V Z F TA26 D
		C837	0CN4720F668	4700P 16V M X TA26
		C838	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C839	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C840	0CE2254K638	2.2M SRA 50V M FM5 TP(5)
		C841	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C842	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C843	0CN4720F668	4700P 16V M X TA26
		C844	0CN1040K948	0.1UF 50V Z F TA26 D
		C845	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C846	0CN1030F678	0.01M 16V M Y TA26
		C847	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C848	0CN2230H948	0.022M 25V Z F TA26
		C849	0CN2230H948	0.022M 25V Z F TA26

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S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		C850	0CE2274C638	220M SRA 6.3V M FM5 TP(5)
		C851	0CN1030F678	0.01M 16V M Y TA26
		C853	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C854	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C855	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C856	0CQ1032K409	0.01UF S 50V J PE TP
		C857	0CQ1032K409	0.01UF S 50V J PE TP
		C858	0CQ3931N409	0.039UF 100V J PE TP
		C859	0CN2210K518	220P 50V K B TA26
		C860	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C861	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C862	0CN1040K948	0.1UF 50V Z F TA26 D
		C863	0CN1040K948	0.1UF 50V Z F TA26 D
		C864	0CN1040K948	0.1UF 50V Z F TA26 D
		C870	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C871	0CQ1032K409	0.01UF S 50V J PE TP
		C872	0CQ1032K409	0.01UF S 50V J PE TP
		C873	0CQ5632K409	0.0560UF S 50V J PE TP
		C874	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C876	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C877	0CN4710K518	470P 50V K B TA26
		C878	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C879	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C881	0CE1063F638	10M SRE/SE 16V M FM5 TP(5)
		C882	0CE1073F638	100M SRE 16V M FM5 TP(5)
		C883	0CN1030F678	0.01M 16V M Y TA26
		C884	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C885	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C887	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C901	0CN1020K518	1000P 50V K B TA26
		C902	0CN1020K518	1000P 50V K B TA26
		C903	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C905	0CN1040K948	0.1UF 50V Z F TA26 D
		C906	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C908	0CN1040K948	0.1UF 50V Z F TA26 D
		C909	0CN1010K518	100P 50V K B -TA26
		C910	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C911	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C912	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C913	0CN1030F678	0.01M 16V M Y TA26
		C914	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C915	0CX4300K408	43P 50V J SL TA26
		C916	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C917	0CE1054K638	1.0M SRA/SS50V M FM5 TP(5)
		C918	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C919	0CN4710K518	470P 50V K B TA26
		C920	0CN1020K518	1000P 50V K B TA26
		C923	0CX1000K408	10P 50V J SL TA26
		C924	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C925	0CN1030F678	0.01M 16V M Y TA26
		C926	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C927	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C929	0CE4775C638	470M SR 6.3V M FM5 TP(5)
		C930	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C931	0CN1030F678	0.01M 16V M Y TA26
		C932	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C933	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C934	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C935	0CE2264F638	22M SRA 16V M FM5 TP(5)
		C936	0CN1020K518	1000P 50V K B TA26
		C937	0CN4710K518	470P 50V K B TA26
		C940	0CX1000K408	10P 50V J SL TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		C943	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C944	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C945	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C946	0CE1064F638	10M SRA 16V M FM5 TP(5)
		C947	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C948	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		C949	0CE1074F638	100U SRA 16V M FM5 TP(5)
		C950	0CE4764F638	47M SRA/SS 16V M FM5 TP(5)
		C9A2	0CN4710K518	470P 50V K B TA26
		C9A8	0CN4710K518	470P 50V K B TA26
		C9A9	0CN1010K518	100P 50V K B TA26
	OR	CP01	624-088B	ECQU2A104MV 0.1UF/250V MATSUSI
		CP01	624-088F	PCX2 275V 0.1UF,M (PILKO)
	OR	CP02	624-088B	ECQU2A104MV 0.1UF/250V MATSUSI
		CP02	624-088F	PCX2 275V 0.1UF,M (PILKO)
		CP03	0CG2210U610	220 PF 400V M B R(NK,AD,SD)
		CP04	0CQ1041N409	0.1U 100V J POLY TP
		CP05	624-082C	100MF/400V SHL SMPS S/Y
		CP06	0CE336BH638	33UF KME 25V M FM5 TP5
		CP07	0CQ5622K409	5600PF S 50V J PE TP
		CP08	0CQ4731N409	0.047U 100V J POLY TP
		CP09	624-087A	HIGH-VOL 150P/1KV SMPS NEW-KOR
		CP10	0CE4744K638	0.47M SRA 50V M FM5 TP(5)
		CP11	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP12	0CE108BF630	1000UF KME 16V M FM5 BULK
		CP13	0CE1086D638	1000UF SMS 10V M FM5 TP5
		CP14	624-085D	CE 47UF/50V KME (SMPS)
		CP15	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP16	0CE108BH630	1000UF KME TYPE 25V M FM5 BULK
		CP17	0CE477BH638	470UF KME 25V M FM5 TP5
		CP18	624-085D	CE 47UF/50V KME (SMPS)
		CP19	0CE1074F638	100U SRA 16V M FM5 TP(5)
		CP20	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP21	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP24	0CQ1031Y519	0.01UF D 630V K PE NI TP
		CP25	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP27	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP28	0CE1054F638	10M SRA 16V M FM5 TP(5)
		CP29	0CQ1022K409	1000PF S 50V J PE TP
		CP30	0CE1064F638	10M SRA 16V M FM5 TP(5)
		CP40	0CG3320U642	3300 PF 400V M F FM (NK,AD,SD)
		CP41	0CE1064F638	10M SRA 16V M FM5 TP(5)

DIODE

	BDP01	0DD160000DA	S1WBA60(1A 600V) SHIDENKEN
	D101	0DD133009AA	1SS133 DETECT,SW TP
	D152	0DD133009AA	1SS133 DETECT,SW TP
	D201	0DD133009AA	1SS133 DETECT,SW TP
	D210	0DD133009AA	1SS133 DETECT,SW TP
	D213	0DD133009AA	1SS133 DETECT,SW TP
	D301	0DD133009AA	1SS133 DETECT,SW TP
	D302	0DD133009AA	1SS133 DETECT,SW TP
	D303	0DD133009AA	1SS133 DETECT,SW TP
	D305	0DD133009AA	1SS133 DETECT,SW TP
	D502	0DD133009AA	1SS133 DETECT,SW TP
	D507	0DD133009AA	1SS133 DETECT,SW TP
	D509	0DD133009AA	1SS133 DETECT,SW TP
	D601	0DD133009AA	1SS133 DETECT,SW TP
	D602	0DD133009AA	1SS133 DETECT,SW TP
	D603	0DD133009AA	1SS133 DETECT,SW TP
	D604	0DD133009AA	1SS133 DETECT,SW TP
	D605	0DD133009AA	1SS133 DETECT,SW TP

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		D606	0DD133009AA	1SS133 DETECT,SW TP
		D607	0DD133009AA	1SS133 DETECT,SW TP
		D901	0DD133009AA	1SS133 DETECT,SW TP
		D902	0DD133009AA	1SS133 DETECT,SW TP
		DP01	0DD207000AB	2A07 2A RECT(T/S)P=12.5 F DELT
		DP02	0DD133009AA	1SS133 DETECT,SW TP
		DP03	0DD133009AA	1SS133 DETECT,SW TP
		DP04	0DD221009AA	ERA22-10 KFLB,TP ,R T/P,FUJI
		DP05	0DD010009AC	EU01W(R-FORM) TP SANKEN
		DP06	0DD140000BA	FMBG14L SANKEN
		DP08	0DD120000BC	FMPG12S SANKEN
		DP09	0DD010009AC	EU01W(R-FORM) TP SANKEN
		DP10	0DD010009AC	EU01W(R-FORM) TP SANKEN
LEVEL METER				
		DIG201	6302R2P004A	SVV11MM16 PAL SUPER 15MM
FUSE				
		FP01	585-011C	T 1.6A 250V S506
FILTER				
		FL301	6200RDB001A	A285TCIS-K5394 TOKO 12.44M TRA
		FL302	6200RDB003A	A285TCHS-K5395 TOKO 5.68M TRA
		FL303	6200RDB002A	TH315LNMS-K5396TAD(1149) TOKO
		FL751	616-038D	CERAMIC SFT5.5MA MURATA
		FL752	616-038E	CERAMIC SFT5.74MA
		LP01	616-145H	SHT LFS2020V4-04350
IC				
		IC002	0IMA331700A	AN3317K PRE AMP 22DIP
		IC101	0ISM565000A	SDA5650 DIP14 BK VPS+PDS
		IC151	0ISA747619D	LC74761M-9725 30DIP BK OSD S90
		IC201	0IMA125100A	MN12510 QFP44 FLP DRIVE
		IC202	0IRH152180B	BA15218(HEAD-PHONE AMP)DIP
		IC301	0IJV005400A	JCP0054 80QFP BK Y/C
		IC302	0IHI118092A	HA118092FP 16SOP TP BUFFER
		IC303	0IMI623530A	M62353FP 16SOP TP D/A CONVERTO
		IC304	0IJV207600B	VC2076DP (S-VHS EMPHASIS) DIP
		IC305	0IAL241600B	AT24C16-10PC 8D EEPROM 16K
		IC306	0ISS431000A	KA431AZ (LM431AZ)
		IC401	0IJV004200A	JCP0042 100QFP BK SEPA
		IC403	0IJR224000B	NJM2240D DIP8 BK S/W
		IC501	0IGS397737A	GMS3977RA-A37F 100QFP BK MICOM
		IC502	0ISS308200A	KA3082 10-SIP BK MOTOR DRIVE
		IC504	0IKE703100A	KIA7031P 3P 3.1V RESET(TAPING)
		IC505	0IKE704200B	KIA7042P 3P 4.2V RESET(TAPING)
		IC601	0IHI118191A	HA118191NT PRE-AMP DIP
		IC701	0ISA701600A	LA7016 ANALOG SW
		IC751	0ITF286014A	U2860B DIP14 FM DEMOD
		IC752	0IPH984000A	TDA9840 ST MATRIX
		IC802	0IRH775500A	BA7755A(HEAD S/W)
		IC890	0ISS324000B	KA324 OP AMP
		IC901	0ISG640000A	STV6400 S/W IC DIP
		IC902	0ISA701600A	LA7016 ANALOG SW
		IC903	0ISS324000B	KA324 OP AMP
		ICP01	0IFE531100A	FA5311P PWM IC (FUJI) DIP
	OR	ICP01	0ISS755200A	KA7552 PWMIC 8DIP 30V
		ICP03	0ISS431000A	KA431AZ (LM431AZ)

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
JACK				
		JK201	572-034S	BJP-202(YL) BAEEUN ST,2P
		JK202	572-034R	BJP-202(WHITE) BAEEUN ST,2P
		JK203	572-034Q	BJP-202(RED) BAEEUN ST,2P
		JK204	572-055A	MIC HSJ1406-01-010
		JK205	572-105A	TCS7940-01-2011 (HOSIDEN)
		JK901	572-034B	PIN JPJ1022-01-020 (RED)
		JK902	572-034C	PIN JPJ1022-01-030 (WH)
		JK906	572-053A	-S (IN) TCS7948-01-201
COIL				
		BCP01	636-004C	BEAD CORE BFS3550R2FD8,R T/P
		BD501	636-004C	BEAD CORE BFS3550R2FD8,R T/P
		BD701	636-004C	BEAD CORE BFS3550R2FD8,R T/P
		BD901	636-004C	BEAD CORE BFS3550R2FD8,R T/P
		BD902	636-004C	BEAD CORE BFS3550R2FD8,R T/P
		L001	0LR3300J025	330UH 5% 4X5 TR5
		L002	0LA2200K018	220M K 2.3X3.4 L5 TP
		L101	0LR1000J025	100UH 5% 4X5 TR5
		L151	0LR1000J025	100UH 5% 4X5 TR5
		L152	0LR1000J025	100UH 5% 4X5 TR5
		L153	0LR1000J025	100UH 5% 4X5 TR5
		L155	0LR1000J025	100UH 5% 4X5 TR5
		L156	635-028A	EL0405SKI-5R6G-3 J-TDK 2% 5.6U
		L157	0LA0222K018	22M K 2.3X3.4 L5 TP
		L158	0LA1000K018	100M K 2.3X3.4 L5 TP
		L159	0LA0472K018	47M K 2.3X3.4 L5 TP
		L201	0LR1000J025	100UH 5% 4X5 TR5
		L202	0LA1000K018	100M K 2.3X3.4 L5 TP
		L203	0LA1000K018	100M K 2.3X3.4 L5 TP
		L301	0LR8201J045	8200UH 5% 6X7 TR5
		L302	0LA0272K018	27M K 2.3X3.4 L5 TP
		L303	0LA0102K018	10M K 2.3X3.4 L5 TP
		L304	0LA0562K018	56M K 2.3X3.4 L5 TP
		L305	0LA1500K018	150M K 2.3X3.4 L5 TP
		L306	0LA1000K018	100M K 2.3X3.4 L5 TP
		L307	0LA0562K018	56M K 2.3X3.4 L5 TP
		L308	0LR0472J025	47UH 5% 4X5 TR5
		L309	0LR0472J025	47UH 5% 4X5 TR5
		L310	0LR0472J025	47UH 5% 4X5 TR5
		L311	0LR0472J025	47UH 5% 4X5 TR5
		L312	0LR0472J025	47UH 5% 4X5 TR5
		L313	0LR0472J025	47UH 5% 4X5 TR5
		L314	0LR0472J025	47UH 5% 4X5 TR5
		L315	0LR0472J025	47UH 5% 4X5 TR5
		L316	0LA0272K018	27M K 2.3X3.4 L5 TP
		L317	0LA0272K018	27M K 2.3X3.4 L5 TP
		L318	0LA0562K018	56M K 2.3X3.4 L5 TP
		L319	0LA0182K018	18M K 2.3X3.4 L5 TP
		L320	0LA0152K018	15M K 2.3X3.4 L5 TP
		L321	0LA0332K018	33M K 2.3X3.4 L5 TP
		L322	0LA0392K018	39M K 2.3X3.4 L5 TP
		L323	0LA2200K018	220M K 2.3X3.4 L5 TP
		L324	0LA0102K018	10M K 2.3X3.4 L5 TP
		L325	0LR2201J045	2200M J 6X7 L5 TP
		L326	0LA2200K018	220M K 2.3X3.4 L5 TP
		L401	0LA0102K018	10M K 2.3X3.4 L5 TP
		L402	0LR0472J025	47UH 5% 4X5 TR5
		L403	0LR0472J025	47UH 5% 4X5 TR5
		L404	0LA0332K018	33M K 2.3X3.4 L5 TP
		L405	0LA0152K018	15M K 2.3X3.4 L5 TP

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		L406	0LA0332K018	33M K 2.3X3.4 L5 TP
		L407	0LA0152K018	15M K 2.3X3.4 L5 TP
		L408	0LA0332K018	33M K 2.3X3.4 L5 TP
		L409	0LA0152K018	15M K 2.3X3.4 L5 TP
		L410	0LA0332K018	33M K 2.3X3.4 L5 TP
		L411	0LA0222K018	22M K 2.3X3.4 L5 TP
		L414	0LA0222K018	22M K 2.3X3.4 L5 TP
		L415	0LA0332K018	33M K 2.3X3.4 L5 TP
		L416	0LR0472J025	47UH 5% 4X5 TR5
		L417	0LR0472J025	47UH 5% 4X5 TR5
		L418	0LR0472J025	47UH 5% 4X5 TR5
		L502	0LR1000J025	100UH 5% 4X5 TR5
		L503	0LR2200J025	220UH 5% 4X5 TR5
		L601	0LR1000K035	100M K 6X6 L5 TP
		L602	0LA0562K018	56M K 2.3X3.4 L5 TP
		L603	0LA0472K018	47M K 2.3X3.4 L5 TP
		L604	0LA1500K018	150M K 2.3X3.4 L5 TP
		L605	0LA1800K018	180M K 2.3X3.4 L5 TP
		L606	0LA0562K018	56M K 2.3X3.4 L5 TP
		L607	0LR1000K035	100M K 6X6 L5 TP
		L608	0LR1000K035	100M K 6X6 L5 TP
		L609	0LA0472K018	47M K 2.3X3.4 L5 TP
		L611	0LA0182K018	18M K 2.3X3.4 L5 TP
		L612	0LR1000K035	100M K 6X6 L5 TP
		L613	0LA2200K018	220M K 2.3X3.4 L5 TP
		L614	0LA2200K018	220M K 2.3X3.4 L5 TP
		L615	0LA0102K018	10M K 2.3X3.4 L5 TP
		L702	0LR0472J025	47UH 5% 4X5 TR5
		L703	0LR0102K035	10M K 6X6 L5 TP
		L704	0LR1000J025	100UH 5% 4X5 TR5
		L705	0LR1000J025	100UH 5% 4X5 TR5
		L706	0LR1000J025	100UH 5% 4X5 TR5
		L711	0LR1000J025	100UH 5% 4X5 TR5
		L712	0LA0122K018	12M K 2.3X3.4 L5 TP
		L751	0LR1000K035	100M K 6X6 L5 TP
		L752	0LR1000K035	100M K 6X6 L5 TP
		L753	0LR2201J045	2200M J 6X7 L5 TP
		L801	0LA0102K018	10M K 2.3X3.4 L5 TP
		L802	0LR1502J045	0.015H J 6X7 L5 TP
		L804	0LR1000J025	100UH 5% 4X5 TR5
		L805	0LR8200J025	820UH 5% 4X5 TR5
		L806	0LR8200J025	820UH 5% 4X5 TR5
		L870	0LR8200J025	820UH 5% 4X5 TR5
		L873	0LR8200J025	820UH 5% 4X5 TR5
		L901	0LA1000K018	100M K 2.3X3.4 L5 TP
		L902	0LA1000K018	100M K 2.3X3.4 L5 TP
		L903	0LR1000J025	100UH 5% 4X5 TR5
		L904	0LR1000J025	100UH 5% 4X5 TR5
		L905	0LA1000K018	100M K 2.3X3.4 L5 TP
		L906	0LA1000K018	100M K 2.3X3.4 L5 TP
		L907	0LA1000K018	100M K 2.3X3.4 L5 TP
		L908	0LA1000K018	100M K 2.3X3.4 L5 TP
		L909	0LA0821K018	8.2M K 2.3X3.4 L5 TP
		L910	0LR1000J025	100UH 5% 4X5 TR5
		L911	0LA1000K018	100M K 2.3X3.4 L5 TP
		L912	0LA1000K018	100M K 2.3X3.4 L5 TP
		L913	0LA1000K018	100M K 2.3X3.4 L5 TP
		L914	0LA1000K018	100M K 2.3X3.4 L5 TP
		L915	0LA0821K018	8.2M K 2.3X3.4 L5 TP
		L916	0LR1000J025	100UH 5% 4X5 TR5
		L917	0LA0560K018	0.56M K 2.3X3.4 L5 TP
		L918	0LA0121K018	1.2M K 2.3X3.4 L5 TP

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		LP04	633-088D	CHOCK ,20UH,LEAD CUT
		LP06	633-088D	CHOCK ,20UH,LEAD CUT
		TL801	633-032G	BIAS OSC(KWANGSUNG)
		TL802	633-032G	BIAS OSC(KWANGSUNG)
LED				
	OR	LD201	0DL100000BB	LTL-16KEE RED
		LD201	0DL112000AJ	DL-11S2RNS(SUPER,RED,03)KOC
		LD202	0DL531100AA	SG5311 GRN KOTECO
		LD501	0DL380009AA	GL380JTP IR LED D-27 TP SHARP
CONNECTOR				
		P5P01	561-283H	52556-0990 (STICK)
		P5P02	561-283H	52556-0990 (STICK)
		PM601	561-282K	IL-SDA-12P-S2T2 (STICK)
		PM602	561-282K	IL-SDA-12P-S2T2 (STICK)
		PMD01	561-252E	TKC-G06P-A1 (TAIKO)
		PMD03	561-283H	52556-0990 (STICK)
		PMD04	561-256A	HPC0750-01WA(MODE S/W)HOSIDEN
		PMD05	561-280A	TMC-E02X-B1 ST
CIRCUIT BOARD ASSEMBLY				
		PBJ00	6871R-1058A	JACK I/O
		PBM00	6871R-1057E	MAIN(S909LP)
TRANSFORMER				
		PTP01	642-023H	S/W TRANS SHT-023H,DYT-023H
TRANSISTOR				
	OR	FEP01	0TF266600AA	2SK2666 BK SHINDENKEN 900V 3A
		FEP01	0TF380000AA	SSSS3N80A BK SAMSUNG 800V 3A T
	OR	FEP01	0TF380020AA	SSSS3N80,T0220F
		Q001	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q002	0TR319909AF	KTC3199-BL MINI TP KEC
		Q003	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q101	0TR319909AF	KTC3199-BL MINI TP KEC
		Q102	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q103	0TR126709AC	KTA1267-GR MINI TP KEC
		Q154	0TR126709AC	KTA1267-GR MINI TP KEC
		Q155	0TR319909AF	KTC3199-BL MINI TP KEC
		Q156	0TR126709AC	KTA1267-GR MINI TP KEC
		Q157	0TR319909AF	KTC3199-BL MINI TP KEC
		Q159	0TR126709AC	KTA1267-GR MINI TP KEC
		Q160	0TR319909AF	KTC3199-BL MINI TP KEC
		Q161	0TR126709AC	KTA1267-GR MINI TP KEC
		Q162	0TR126709AC	KTA1267-GR MINI TP KEC
		Q201	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q202	0TR319909AF	KTC3199-BL MINI TP KEC
		Q203	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q204	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q301	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q302	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q303	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q304	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q305	0TR126709AC	KTA1267-GR MINI TP KEC
		Q306	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q307	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q310	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q311	0TR103009AE	KRC103M-TP (KRC1203) KEC

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S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		Q312	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q313	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		Q314	0TR126709AC	KTA1267-GR MINI TP KEC
		Q315	0TR319909AF	KTC3199-BL MINI TP KEC
		Q316	0TR319909AF	KTC3199-BL MINI TP KEC
		Q317	0TR126709AC	KTA1267-GR MINI TP KEC
		Q318	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q319	0TR319909AF	KTC3199-BL MINI TP KEC
		Q320	0TR319909AF	KTC3199-BL MINI TP KEC
		Q321	0TR319909AF	KTC3199-BL MINI TP KEC
		Q322	0TR319909AF	KTC3199-BL MINI TP KEC
		Q323	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q324	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q325	0TR126709AC	KTA1267-GR MINI TP KEC
		Q326	0TR319909AF	KTC3199-BL MINI TP KEC
		Q327	0TR126709AC	KTA1267-GR MINI TP KEC
		Q328	0TR319909AF	KTC3199-BL MINI TP KEC
		Q329	0TR319909AF	KTC3199-BL MINI TP KEC
		Q330	0TR319909AF	KTC3199-BL MINI TP KEC
		Q331	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q332	0TR126709AC	KTA1267-GR MINI TP KEC
		Q333	0TR319909AF	KTC3199-BL MINI TP KEC
		Q334	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q335	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q401	0TR319909AF	KTC3199-BL MINI TP KEC
		Q402	0TR319909AF	KTC3199-BL MINI TP KEC
		Q403	0TR319909AF	KTC3199-BL MINI TP KEC
		Q404	0TR319909AF	KTC3199-BL MINI TP KEC
		Q405	0TR319909AF	KTC3199-BL MINI TP KEC
		Q406	0TR319909AF	KTC3199-BL MINI TP KEC
		Q407	0TR319909AF	KTC3199-BL MINI TP KEC
		Q408	0TR319909AF	KTC3199-BL MINI TP KEC
		Q409	0TR126709AC	KTA1267-GR MINI TP KEC
		Q410	0TR126709AC	KTA1267-GR MINI TP KEC
		Q411	0TR319909AF	KTC3199-BL MINI TP KEC
		Q412	0TR319909AF	KTC3199-BL MINI TP KEC
		Q413	0TR319909AF	KTC3199-BL MINI TP KEC
		Q414	0TR126709AC	KTA1267-GR MINI TP KEC
		Q415	0TR126709AC	KTA1267-GR MINI TP KEC
		Q416	0TR319909AF	KTC3199-BL MINI TP KEC
		Q417	0TR126709AC	KTA1267-GR MINI TP KEC
		Q418	0TR126709AC	KTA1267-GR MINI TP KEC
		Q419	0TR319909AF	KTC3199-BL MINI TP KEC
		Q501	0TR933009DB	STA933Y TP KOTECO
		Q502	0TR933009DB	STA933Y TP KOTECO
		Q503	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q504	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q508	0TR319909AF	KTC3199-BL MINI TP KEC
		Q509	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		Q510	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q601	0TR319909AF	KTC3199-BL MINI TP KEC
		Q602	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q603	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q604	0TR319909AF	KTC3199-BL MINI TP KEC
		Q605	0TR126709AC	KTA1267-GR MINI TP KEC
		Q606	0TR319909AF	KTC3199-BL MINI TP KEC
		Q607	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q608	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q609	0TR319909AF	KTC3199-BL MINI TP KEC
		Q610	0TR319909AF	KTC3199-BL MINI TP KEC
		Q611	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q612	0TR319909AF	KTC3199-BL MINI TP KEC

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		Q613	0TR319909AF	KTC3199-BL MINI TP KEC
		Q614	0TR319909AF	KTC3199-BL MINI TP KEC
		Q615	0TR319909AF	KTC3199-BL MINI TP KEC
		Q616	0TR319909AF	KTC3199-BL MINI TP KEC
		Q617	0TR126709AC	KTA1267-GR MINI TP KEC
		Q618	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q619	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q702	0TR319909AF	KTC3199-BL MINI TP KEC
		Q703	0TR126709AC	KTA1267-GR MINI TP KEC
		Q704	0TR319909AF	KTC3199-BL MINI TP KEC
		Q706	0TR319909AF	KTC3199-BL MINI TP KEC
		Q707	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q801	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q802	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q803	0TR319909AF	KTC3199-BL MINI TP KEC
		Q804	0TR126709AC	KTA1267-GR MINI TP KEC
		Q805	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q806	0TR126709AC	KTA1267-GR MINI TP KEC
		Q807	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q808	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		Q809	0TR319909AF	KTC3199-BL MINI TP KEC
		Q870	0TR319909AF	KTC3199-BL MINI TP KEC
		Q871	0TR319909AF	KTC3199-BL MINI TP KEC
		Q873	0TR319909AF	KTC3199-BL MINI TP KEC
		Q874	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q875	0TR126709AC	KTA1267-GR MINI TP KEC
		Q876	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		Q901	0TR126709AC	KTA1267-GR MINI TP KEC
		Q902	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q903	0TR103009AE	KRC103M-TP (KRC1203) KEC
		Q904	0TR319909AF	KTC3199-BL MINI TP KEC
		Q905	0TR319909AF	KTC3199-BL MINI TP KEC
		Q906	0TR126709AC	KTA1267-GR MINI TP KEC
		Q907	0TR126709AC	KTA1267-GR MINI TP KEC
		Q908	0TR126709AC	KTA1267-GR MINI TP KEC
		Q909	0TR126709AC	KTA1267-GR MINI TP KEC
		QP01	0TR141409AB	KTD1414-B CUTING TP KEC
		QP02	0TR141409AB	KTD1414-B CUTING TP KEC
		QP03	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		QP04	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		QP05	0TR103009AF	KRA103M-TP (KRA2203) KEC
		QP06	0TR103009AE	KRC103M-TP (KRC1203) KEC
		QP07	0TR319909AF	KTC3199-BL MINI TP KEC
		QP08	0TR103009AF	KRA103M-TP (KRA2203) KEC
		QP09	0TR103009AE	KRC103M-TP (KRC1203) KEC
		QP10	0TR320509AB	KTC3205-TP-Y (KTC2236A)KEC
		QP11	0TR709009AE	KSA709C-Y TP SAMSUNG T0-92
		QP12	0TR319909AF	KTC3199-BL MINI TP KEC
		QP13	0TR319909AF	KTC3199-BL MINI TP KEC
		QP16	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		QP17	0TR127309AA	KTA1273-TP-Y (KTA966A)KEC
		QP18	0TR319909AF	KTC3199-BL MINI TP KEC
		QP19	0TR319909AF	KTC3199-BL MINI TP KEC
		S501	0TR581139AA	ST5811S3T TP
		S502	0TR581139AA	ST5811S3T TP
RESISTOR				
		RP27	0RD1003F608	100K 1/6W 5 TA26
REMOCON RECEIVER				
		RC201	6712R2038AA	PIC21143TL KODENSHI 17.6MM 37.

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S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
SENSOR				
	OR	ICP02	657-061B	PHOTO COUPLER PS2561-1-V NEC
	OR	ICP02	657-062A	PC817 PHOTO COUPLER(SHARP)
		ICP02	657-063A	LTV-817B,PHOTO COUPLER(LITEON)
		S503	657-040B	REEL RPI-352Q01 D-27 ROHM-J
		S504	657-040B	REEL RPI-352Q01 D-27 ROHM-J
SCART				
		JK903	573-006C	RGB SOKET SR-21S3 21PIN (BK)
		JK904	573-006D	RGB (BLUE)
SWITCH				
		JS201	556-164A	SRGPHJ1100
		SW201	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW202	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW203	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW204	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW205	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW206	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW207	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW208	556-282C	SKQNQED ALPS 5MM 12V/50MAV TAC
		SW501	556-244A	REC S/W,MPU10105MMBO,MIC
		SW502	556-243D	F/L S/W,MPU10400(MIC),D-27
		SW503	556-243D	F/L S/W,MPU10400(MIC),D-27
		SW901	556-023M	KSA-2240,KIE,SILIDE
TUNER				
		TU701	6700RP3L01B	TADC-G001D LGEC BG 3IN1
VARIABLE RESISTOR				
		VR201	611-024B	RK09K113000123B
		VR501	613-029W	VARIABLE EVN-CYY A03BE5-220K
		VR752	6110RSHK01A	RH063LCS3R,4.7K,ANGLE VR
		VR801	613-032U	RH063MC15R0WA (100K)
CRYSTAL				
		X151	529-022V	17.734476MHZ CL-12P 25PPM LEAD
		X502	529-001B	32.768KHZ 3*8,KDS
	OR	X502	529-001K	32.768KHZ SEIKO
		X751	529-020I	10.000000MHZ 30PPM NO-TU L=4.0
RESONATOR				
		X201	618-010A	CST4.00MGW-TF01S MURATA
		X301	6202R1443CA	HC49U KJE RADIAL 4.433619MHZ 1
		X501	6202R1100AC	10MHZ 30PPM 12PF 49/U BK KJE
ZENER DIODE				
		ZD201	0DZ220009ED	MTZ22B T-77 TP ROHM
		ZD202	0DZ160009BA	MTZ16B TP ROHM-K
		ZD203	0DZ160009BA	MTZ16B TP ROHM-K
		ZD204	0DZ160009BA	MTZ16B TP ROHM-K
		ZD205	0DZ160009BA	MTZ16B TP ROHM-K
		ZD206	0DZ160009BA	MTZ16B TP ROHM-K
		ZD207	0DZ160009BA	MTZ16B TP ROHM-K
		ZD208	0DZ160009BA	MTZ16B TP ROHM-K
		ZD209	0DZ160009BA	MTZ16B TP ROHM-K

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		ZD210	0DZ160009BA	MTZ16B TP ROHM-K
		ZD211	0DZ160009BA	MTZ16B TP ROHM-K
		ZD212	0DZ160009BA	MTZ16B TP ROHM-K
		ZD213	0DZ160009BA	MTZ16B TP ROHM-K
		ZD214	0DZ160009BA	MTZ16B TP ROHM-K
		ZD215	0DZ160009BA	MTZ16B TP ROHM-K
		ZD217	0DZ510009EB	MTZ5.1B 0.5W TP ROHM-K
		ZD301	0DZ560009CB	MTZ5.6C TP(26MM) ROHM 5.6V
		ZD501	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD502	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD504	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD505	0DZ750009DA	MTZ7.5B TP ROHM-K
		ZD601	0DZ100009AA	MTZ10B MINI TP ROHM-K
		ZD701	0DZ330009AF	MTZ33B,TP,ROHM-K
		ZD702	0DZ560009CA	MTZ5.6B TP ROHM-K
		ZD901	0DZ150009BC	MTZ15B ROHM-K
		ZD902	0DZ150009BC	MTZ15B ROHM-K
		ZD903	0DZ150009BC	MTZ15B ROHM-K
		ZD904	0DZ150009BC	MTZ15B ROHM-K
		ZD905	0DZ110009CB	MTZ11B TP ROHM-K
		ZD906	0DZ150009BC	MTZ15B ROHM-K
		ZD907	0DZ150009BC	MTZ15B ROHM-K
		ZD911	0DZ150009BC	MTZ15B ROHM-K
		ZD912	0DZ150009BC	MTZ15B ROHM-K
		ZD913	0DZ150009BC	MTZ15B ROHM-K
		ZD914	0DZ150009BC	MTZ15B ROHM-K
		ZD915	0DZ150009BC	MTZ15B ROHM-K
		ZD916	0DZ150009BC	MTZ15B ROHM-K
		ZD917	0DZ150009BC	MTZ15B ROHM-K
		ZD918	0DZ150009BC	MTZ15B ROHM-K
		ZD921	0DZ150009BC	MTZ15B ROHM-K
		ZD922	0DZ150009BC	MTZ15B ROHM-K
		ZD923	0DZ150009BC	MTZ15B ROHM-K
		ZD924	0DZ150009BC	MTZ15B ROHM-K
		ZD927	0DZ150009BC	MTZ15B ROHM-K
		ZD928	0DZ150009BC	MTZ15B ROHM-K
		ZD929	0DZ150009BC	MTZ15B ROHM-K
		ZD930	0DZ150009BC	MTZ15B ROHM-K
		ZD931	0DZ150009BC	MTZ15B ROHM-K
		ZD932	0DZ150009BC	MTZ15B ROHM-K
		ZD933	0DZ150009BC	MTZ15B ROHM-K
		ZD934	0DZ150009BC	MTZ15B ROHM-K
		ZDP01	0DZ560009CA	MTZ5.6B TP ROHM-K
		ZDP03	0DZ130009AC	MTZ13B TP ROHM-K
		ZDP04	0DZ100009AA	MTZ10B MINI TP ROHM-K
		ZDP07	0DZ130009AC	MTZ13B TP ROHM-K
		ZDP08	0DZ180009CA	MTZ18B TP ROHM-K
		ZDP09	0DZ220009ED	MTZ22B T-77 TP ROHM

CAUTION: The * marks in the parts list designate components which have special characteristics important for safety and should be replaced only with types identical to those in the original circuit or specified in the parts list. Before replacing any of these components, read carefully the SAFETY PRECAUTIONS and SERVICING PRECAUTIONS in the manual. Do not degrade the safety of the unit through improper servicing.

Tolerance

Symbol	C	J	K	M	N	Z	P	A
%	±2	±5	±10	±20	±30	+80 -20	+100 -10	+100 -10

CC, CJ, CK: Capacitor, Ceramic
CE: Capacitor, Electrolytic
CQ: Capacitor, Polyester

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		RESISTOR		
		R001	0RD2702F608	27K 1/6W 5 TA26
		R002	0RD4701F608	4.7K 1/6W 5 TA26
		R003	0RD1201F608	1.2K 1/6W 5 TA26
		R004	0RD1201F608	1.2K 1/6W 5 TA26
		R005	0RD2701F608	2.7K 1/6W 5 TA26
		R006	0RD1502F608	15K 1/6W 5 TA26
		R007	0RD5601F608	5.6K 1/6W 5 TA26
		R008	0RD3300F608	330 1/6W 5 TA26
		R009	0RD3300F608	330 1/6W 5 TA26
		R010	0RD0102F608	10 1/6W 5 TA26
		R011	0RD0102F608	10 1/6W 5 TA26
		R012	0RD3300F608	330 1/6W 5 TA26
		R013	0RD1001F608	1.0K 1/6W 5 TA26
		R014	0RD4701F608	4.7K 1/6W 5 TA26
		R015	0RD2201F608	2.2K 1/6W 5 TA26
		R016	0RD3301F608	3.3K 1/6W 5 TA26
		R017	0RD4701F608	4.7K 1/6W 5 TA26
		R101	0RD1000F608	100 1/6W 5 TA26
		R102	0RD5603F608	560K 1/6W 5 TA26
		R103	0RD6801F608	6.8K 1/6W 5 TA26
		R104	0RD6801F608	6.8K 1/6W 5 TA26
		R105	0RD5603F608	560K 1/6W 5 TA26
		R106	0RD8202F608	82K 1/6W 5 TA26
		R107	0RD1004F608	1.0M 1/6W 5 TA26
		R108	0RD1001F608	1.0K 1/6W 5 TA26
		R109	0RD4700F608	470 1/6W 5 TA26
		R110	0RD4701F608	4.7K 1/6W 5 TA26
		R111	0RD2202F608	22K 1/6W 5 TA26
		R151	0RD1001F608	1.0K 1/6W 5 TA26
		R152	0RD1001F608	1.0K 1/6W 5 TA26
		R153	0RD1001F608	1.0K 1/6W 5 TA26
		R154	0RD1000F608	100 1/6W 5 TA26
		R155	0RD1001F608	1.0K 1/6W 5 TA26
		R156	0RD1001F608	1.0K 1/6W 5 TA26
		R157	0RD1501F608	1.5K 1/6W 5 TA26
		R158	0RD6801F608	6.8K 1/6W 5 TA26
		R159	0RD1200F608	120 1/6W 5 TA26
		R160	0RD1001F608	1.0K 1/6W 5 TA26
		R161	0RD1001F608	1.0K 1/6W 5 TA26
		R162	0RD1001F608	1.0K 1/6W 5 TA26
		R163	0RD2201F608	2.2K 1/6W 5 TA26
		R164	0RD2201F608	2.2K 1/6W 5 TA26
		R165	0RD1801F608	1.8K 1/6W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R166	0RD1503F608	150K 1/6W 5 TA26
		R167	0RD1003F608	100K 1/6W 5 TA26
		R168	0RD1202F608	12K 1/6W 5 TA26
		R169	0RD4700F608	470 1/6W 5 TA26
		R170	0RD4702F608	47K 1/6W 5 TA26
		R171	0RD1802F608	18K 1/6W 5 TA26
		R172	0RD1000F608	100 1/6W 5 TA26
		R173	0RD1001F608	1.0K 1/6W 5 TA26
		R174	0RD1001F608	1.0K 1/6W 5 TA26
		R175	0RD1001F608	1.0K 1/6W 5 TA26
		R176	0RD1501F608	1.5K 1/6W 5 TA26
		R179	0RD3301F608	3.3K 1/6W 5 TA26
		R180	0RD1001F608	1.0K 1/6W 5 TA26
		R184	0RD8201F608	8.2K 1/6W 5 TA26
		R186	0RD1001F608	1.0K 1/6W 5 TA26
		R187	0RD1001F608	1.0K 1/6W 5 TA26
		R189	0RD1001F608	1.0K 1/6W 5 TA26
		R201	0RD3300F608	330 1/6W 5 TA26
		R202	0RD3300F608	330 1/6W 5 TA26
		R203	0RD3300F608	330 1/6W 5 TA26
		R204	0RD2702F608	27K 1/6W 5 TA26
		R206	0RD0752F608	75 1/6W 5 TA26
		R207	0RD3300F608	330 1/6W 5 TA26
		R208	0RD3300F608	330 1/6W 5 TA26
		R209	0RD3300F608	330 1/6W 5 TA26
		R210	0RD2702F608	27K 1/6W 5 TA26
		R211	0RD2702F608	27K 1/6W 5 TA26
		R212	0RD2702F608	27K 1/6W 5 TA26
		R213	0RD2702F608	27K 1/6W 5 TA26
		R214	0RD2702F608	27K 1/6W 5 TA26
		R215	0RD2702F608	27K 1/6W 5 TA26
		R216	0RD2702F608	27K 1/6W 5 TA26
		R217	0RD2702F608	27K 1/6W 5 TA26
		R218	0RD1801F608	1.8K 1/6W 5 TA26
		R219	0RD1501F608	1.5K 1/6W 5 TA26
		R220	0RD2201F608	2.2K 1/6W 5 TA26
		R221	0RD2701F608	2.7K 1/6W 5 TA26
		R222	0RD3901F608	3.9K 1/6W 5 TA26
		R223	0RD6801F608	6.8K 1/6W 5 TA26
		R224	0RD1202F608	12K 1/6W 5 TA26
		R225	0RD2701F608	2.7K 1/6W 5 TA26
		R226	0RD2203F608	220K 1/6W 5 TA26
		R227	0RD1000F608	100 1/6W 5 TA26
		R228	0RD2203F608	220K 1/6W 5 TA26
		R229	0RD6801F608	6.8K 1/6W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R230	0RD4701F608	4.7K 1/6W 5 TA26
		R231	0RD1201F608	1.2K 1/6W 5 TA26
		R232	0RD2202F608	22K 1/6W 5 TA26
		R233	0RD4701F608	4.7K 1/6W 5 TA26
		R234	0RD2202F608	22K 1/6W 5 TA26
		R235	0RD0152F608	15 1/6W 5 TA26
		R236	0RD0152F608	15 1/6W 5 TA26
		R237	0RD1003F608	100K 1/6W 5 TA26
		R240	0RD0102F608	10 1/6W 5 TA26
		R241	0RD0102F608	10 1/6W 5 TA26
		R242	0RD0471F608	4.7 1/6W 5 TA26
		R243	0RD0752F608	75 1/6W 5 TA26
		R244	0RD0752F608	75 1/6W 5 TA26
		R245	0RD0472F608	47 1/6W 5 TA26
		R246	0RD2702F608	27K 1/6W 5 TA26
		R247	0RD2702F608	27K 1/6W 5 TA26
		R248	0RD2702F608	27K 1/6W 5 TA26
		R254	0RD1001F608	1.0K 1/6W 5 TA26
		R301	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R302	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R303	0RH3302D622	33K 1/10W 5 D.R/TP
		R304	0RH2701D622	2.7K 1/10W 5 D.R/TP
		R305	0RH1002D622	10K 1/10W 5 D.R/TP
		R306	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R307	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R308	0RH1002D622	10K 1/10W 5 D.R/TP
		R309	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R310	0RH1801D622	1.8K 1/10W 5 D.R/TP
		R311	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R312	0RH1000D622	100 1/10W 5 D.R/TP
		R313	0RH1000D622	100 1/10W 5 D.R/TP
		R314	0RH6803D622	680K 1/10W 5 D.R/TP
		R315	0RH8200D622	820 1/10W 5 D.R/TP
		R316	0RH6801D622	6.8K 1/10W 5 D.R/TP
		R317	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R318	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R319	0RH5100D622	510 1/10W 5 D.R/TP
		R320	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R321	0RH2202D622	22K 1/10W 5 D.R/TP
		R322	0RH6802D622	68K 1/10W 5 D.R/TP
		R323	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R324	0RH3302D622	33K 1/10W 5 D.R/TP
		R325	0RH8201D622	8.2K 1/10W 5 D.R/TP
		R326	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R327	0RH2702D422	27K 1/10W 1% D R/TP
		R328	0RH8201D622	8.2K 1/10W 5 D.R/TP
		R329	0RH1000D622	100 1/10W 5 D.R/TP
		R330	0RH4704D622	4.7M 1/10W 5 TA
		R331	0RH2200D622	220 1/10W 5 D.R/TP
		R332	0RH3300D622	330 1/10W 5 D.R/TP
		R333	0RH1000D622	100 1/10W 5 D.R/TP
		R334	0RH1000D622	100 1/10W 5 D.R/TP
		R335	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R336	0RH1002D622	10K 1/10W 5 D.R/TP
		R337	0RH8202D622	82K 1/10W 5 D.R/TP
		R338	0RH2702D622	27K 1/10W 5 D.R/TP
		R339	0RH1800D622	180 1/10W 5 D.R/TP
		R340	0RH1202D622	12K 1/10W 5 D.R/TP
		R341	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R342	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R343	0RH3901D622	3.9K 1/10W 5 D.R/TP
		R344	0RH1802D622	18K 1/10W 5 D.R/TP

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R345	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R346	0RH6800D622	680 1/10W 5 D.R/TP
		R347	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R348	0RH6800D622	680 1/10W 5 D.R/TP
		R349	0RH5601D622	5.6K 1/10W 5 D.R/TP
		R350	0RH8200D622	820 1/10W 5 D.R/TP
		R351	0RH5600D622	560 1/10W 5 D.R/TP
		R352	0RH1201D622	1.2K 1/10W 5 D.R/TP
		R353	0RH1201D622	1.2K 1/10W 5 D.R/TP
		R354	0RH3300D622	330 1/10W 5 D.R/TP
		R355	0RH5601D622	5.6K 1/10W 5 D.R/TP
		R356	0RH2702D622	27K 1/10W 5 D.R/TP
		R357	0RH3300D622	330 1/10W 5 D.R/TP
		R358	0RH4700D622	470 1/10W 5 D.R/TP
		R359	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R360	0RH5601D622	5.6K 1/10W 5 D.R/TP
		R361	0RH1802D622	18K 1/10W 5 D.R/TP
		R362	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R363	0RH4700D622	470 1/10W 5 D.R/TP
		R364	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R365	0RH1002D622	10K 1/10W 5 D.R/TP
		R366	0RH4700D622	470 1/10W 5 D.R/TP
		R367	0RH4700D622	470 1/10W 5 D.R/TP
		R368	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R369	0RH3901D622	3.9K 1/10W 5 D.R/TP
		R370	0RH5600D622	560 1/10W 5 D.R/TP
		R371	0RH5600D622	560 1/10W 5 D.R/TP
		R372	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R373	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R374	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R375	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R376	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R377	0RH5601D622	5.6K 1/10W 5 D.R/TP
		R378	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R379	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R380	0RH8200D622	820 1/10W 5 D.R/TP
		R381	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R382	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R383	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R384	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R385	0RH4701D622	4.7K 1/10W 5 D.R/TP
		R386	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R387	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R388	0RH3301D422	3.30K 1/10W 1% D R/TP
		R389	0RH3301D422	3.30K 1/10W 1% D R/TP
		R390	0RH4700D422	470 1/10W 1% D R/TP
		R391	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R392	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R393	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R394	0RH1201D422	1.20K 1/10W 1% D R/TP
		R395	0RH1000D622	100 1/10W 5 D.R/TP
		R396	0RH1501D622	1.5K 1/10W 5 D.R/TP
		R397	0RH1500D622	150 1/10W 5 D.R/TP
		R398	0RH3301D422	3.30K 1/10W 1% D R/TP
		R399	0RH3900D422	390 1/10W 1% D R/TP
		R3A1	0RH3301D422	3.30K 1/10W 1% D R/TP
		R3A2	0RH3900D422	390 1/10W 1% D R/TP
		R3A3	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R3A4	0RH3900D422	390 1/10W 1% D R/TP
		R3A5	0RH4704D622	4.7M 1/10W 5 TA
		R3A6	0RH1003D622	100K 1/10W 5 D.R/TP
		R3A7	0RH1001D622	1.0K 1/10W 5 D.R/TP

RUN DATE : 98.11.19

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R3A8	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R3A9	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R3B1	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R3B2	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R3B3	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R3B4	0RH4700D622	470 1/10W 5 D.R/TP
		R3B5	0RH5600D622	560 1/10W 5 D.R/TP
		R3B6	0RH5600D622	560 1/10W 5 D.R/TP
		R401	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R402	0RH4700D622	470 1/10W 5 D.R/TP
		R403	0RH3300D622	330 1/10W 5 D.R/TP
		R404	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R405	0RH3301D622	3.3K 1/10W 5 D.R/TP
		R406	0RH2700D622	270 1/10W 5 D.R/TP
		R407	0RH2700D622	270 1/10W 5 D.R/TP
		R408	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R409	0RH8200D622	820 1/10W 5 D.R/TP
		R410	0RH2200D622	220 1/10W 5 D.R/TP
		R411	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R412	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R413	0RH8200D622	820 1/10W 5 D.R/TP
		R414	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R415	0RH2200D622	220 1/10W 5 D.R/TP
		R416	0RH2700D622	270 1/10W 5 D.R/TP
		R417	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R418	0RH6800D622	680 1/10W 5 D.R/TP
		R419	0RH2201D622	2.2K 1/10W 5 D.R/TP
		R420	0RH2200D622	220 1/10W 5 D.R/TP
		R421	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R422	0RH3901D622	3.9K 1/10W 5 D.R/TP
		R423	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R424	0RH0472D622	47 1/10W 5 D.R/TP
		R425	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R426	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R427	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R428	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R429	0RH2700D622	270 1/10W 5 D.R/TP
		R430	0RH3900D622	390 1/10W 5 D.R/TP
		R431	0RH2701D622	2.7K 1/10W 5 D.R/TP
		R432	0RH3302D622	33K 1/10W 5 D.R/TP
		R433	0RH1202D622	12K 1/10W 5 D.R/TP
		R434	0RH2202D622	22K 1/10W 5 D.R/TP
		R435	0RH2202D622	22K 1/10W 5 D.R/TP
		R436	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R437	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R438	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R439	0RH2700D622	270 1/10W 5 D.R/TP
		R440	0RH3900D622	390 1/10W 5 D.R/TP
		R441	0RH8200D622	820 1/10W 5 D.R/TP
		R442	0RH2701D622	2.7K 1/10W 5 D.R/TP
		R443	0RH5602D622	56K 1/10W 5 D.R/TP
		R444	0RH8200D622	820 1/10W 5 D.R/TP
		R445	0RH1802D622	18K 1/10W 5 D.R/TP
		R448	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R449	0RH4702D622	47K 1/10W 5 D.R/TP
		R455	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R456	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R457	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R458	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R459	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R460	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R461	0RH1001D622	1.0K 1/10W 5 D.R/TP

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R462	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R463	0RH1001D622	1.0K 1/10W 5 D.R/TP
		R464	0RH5600D622	560 1/10W 5 D.R/TP
		R465	0RH8200D622	820 1/10W 5 D.R/TP
		R466	0RH1201D622	1.2K 1/10W 5 D.R/TP
		R501	0RD4701F608	4.7K 1/6W 5 TA26
		R502	0RD4701F608	4.7K 1/6W 5 TA26
		R503	0RD4701F608	4.7K 1/6W 5 TA26
		R504	0RD4701F608	4.7K 1/6W 5 TA26
		R505	0RD4701F608	4.7K 1/6W 5 TA26
		R506	0RD4701F608	4.7K 1/6W 5 TA26
		R507	0RD1003F608	100K 1/6W 5 TA26
		R508	0RD4701F608	4.7K 1/6W 5 TA26
		R509	0RD1003F608	100K 1/6W 5 TA26
		R510	0RD1001F608	1.0K 1/6W 5 TA26
		R511	0RD3300F608	330 1/6W 5 TA26
		R512	0RD3300F608	330 1/6W 5 TA26
		R513	0RD1202F608	12K 1/6W 5 TA26
		R514	0RD4701F608	4.7K 1/6W 5 TA26
		R515	0RD3300F608	330 1/6W 5 TA26
		R516	0RD3300F608	330 1/6W 5 TA26
		R517	0RD1202F608	12K 1/6W 5 TA26
		R518	0RD4701F608	4.7K 1/6W 5 TA26
		R519	0RD2200F608	220 1/6W 5 TA26
		R520	0RD1001F608	1.0K 1/6W 5 TA26
		R521	0RD1003F608	100K 1/6W 5 TA26
		R522	0RD1001F608	1.0K 1/6W 5 TA26
		R523	0RD1002F608	10K 1/6W 5 TA26
		R524	0RD1003F608	100K 1/6W 5 TA26
		R525	0RD2700F608	270 1/6W 5 TA26
		R526	0RD5601F608	5.6K 1/6W 5 TA26
		R527	0RD1001F608	1.0K 1/6W 5 TA26
		R528	0RD1001F608	1.0K 1/6W 5 TA26
		R529	0RD1001F608	1.0K 1/6W 5 TA26
		R530	0RD1001F608	1.0K 1/6W 5 TA26
		R531	0RD1002F608	10K 1/6W 5 TA26
		R532	0RD1002F608	10K 1/6W 5 TA26
		R533	0RS0621K619	6.2 OHM 2 W 5% TR R T/P
		R535	0RD2201F608	2.2K 1/6W 5 TA26
		R536	0RD1002F608	10K 1/6W 5 TA26
		R537	0RD1002F608	10K 1/6W 5 TA26
		R538	0RD1002F608	10K 1/6W 5 TA26
		R539	0RD5602F608	56K 1/6W 5 TA26
		R540	0RD1001F608	1.0K 1/6W 5 TA26
		R541	0RD4701F608	4.7K 1/6W 5 TA26
		R544	0RD1001F608	1.0K 1/6W 5 TA26
		R553	0RD1001F608	1.0K 1/6W 5 TA26
		R554	0RD5600F608	560 1/6W 5 TA26
		R555	0RD5600F608	560 1/6W 5 TA26
		R559	0RD1004F608	1.0M 1/6W 5 TA26
		R560	0RD5601F608	5.6K 1/6W 5 TA26
		R561	0RD1002F608	10K 1/6W 5 TA26
		R562	0RD1003F608	100K 1/6W 5 TA26
		R564	0RD1002F608	10K 1/6W 5 TA26
		R565	0RD1002F608	10K 1/6W 5 TA26
		R566	0RD2203F608	220K 1/6W 5 TA26
		R567	0RD2203F608	220K 1/6W 5 TA26
		R575	0RD1000F608	100 1/6W 5 TA26
		R576	0RD1000F608	100 1/6W 5 TA26
		R578	0RD6800F608	680 1/6W 5 TA26
		R579	0RD3902F608	39K 1/6W 5 TA26
		R580	0RD6803F608	680K 1/6W 5 TA26

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S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R587	0RD1202F608	12K 1/6W 5 TA26
		R588	0RD5601F608	5.6K 1/6W 5 TA26
		R589	0RD3302F608	33K 1/6W 5 TA26
		R590	0RD2200F608	220 1/6W 5 TA26
		R591	0RD1001F608	1.0K 1/6W 5 TA26
		R592	0RD1001F608	1.0K 1/6W 5 TA26
		R593	0RD2702F608	27K 1/6W 5 TA26
		R5J3	0RD2201F608	2.2K 1/6W 5 TA26
		R5J4	0RD2201F608	2.2K 1/6W 5 TA26
		R5M1	0RD1001F608	1.0K 1/6W 5 TA26
		R5M2	0RD1001F608	1.0K 1/6W 5 TA26
		R5M3	0RD1001F608	1.0K 1/6W 5 TA26
		R5M4	0RD1001F608	1.0K 1/6W 5 TA26
		R5S1	0RD1001F608	1.0K 1/6W 5 TA26
		R5S2	0RD1001F608	1.0K 1/6W 5 TA26
		R5S3	0RD1001F608	1.0K 1/6W 5 TA26
		R5S4	0RD1001F608	1.0K 1/6W 5 TA26
		R5S5	0RD3301F608	3.3K 1/6W 5 TA26
		R5S6	0RD1502F608	15K 1/6W 5 TA26
		R5S7	0RD1002F608	10K 1/6W 5 TA26
		R5S8	0RD2201F608	2.2K 1/6W 5 TA26
		R5S9	0RD2201F608	2.2K 1/6W 5 TA26
		R601	0RD0682F608	68 1/6W 5 TA26
		R602	0RD4700F608	470 1/6W 5 TA26
		R603	0RD0122F608	12 1/6W 5 TA26
		R604	0RD0682F608	68 1/6W 5 TA26
		R605	0RD0822F608	82 1/6W 5 TA26
		R606	0RD4700F608	470 1/6W 5 TA26
		R607	0RD0822F608	82 1/6W 5 TA26
		R608	0RD1801F608	1.8K 1/6W 5 TA26
		R609	0RD1501F608	1.5K 1/6W 5 TA26
		R610	0RD1202F608	12K 1/6W 5 TA26
		R611	0RD1001F608	1.0K 1/6W 5 TA26
		R612	0RD1001F608	1.0K 1/6W 5 TA26
		R613	0RD1000F608	100 1/6W 5 TA26
		R614	0RD2701F608	2.7K 1/6W 5 TA26
		R615	0RD1501F608	1.5K 1/6W 5 TA26
		R616	0RD2701F608	2.7K 1/6W 5 TA26
		R617	0RD1801F608	1.8K 1/6W 5 TA26
		R618	0RD2201F608	2.2K 1/6W 5 TA26
		R619	0RD0682F608	68 1/6W 5 TA26
		R620	0RD2201F608	2.2K 1/6W 5 TA26
		R621	0RD3300F608	330 1/6W 5 TA26
		R622	0RD3301F608	3.3K 1/6W 5 TA26
		R623	0RD6800F608	680 1/6W 5 TA26
		R624	0RD3301F608	3.3K 1/6W 5 TA26
		R625	0RD8201F608	8.2K 1/6W 5 TA26
		R626	0RD1001F608	1.0K 1/6W 5 TA26
		R627	0RD1002F608	10K 1/6W 5 TA26
		R628	0RD1001F608	1.0K 1/6W 5 TA26
		R629	0RD1201F608	1.2K 1/6W 5 TA26
		R630	0RD1001F608	1.0K 1/6W 5 TA26
		R631	0RD1002F608	10K 1/6W 5 TA26
		R632	0RD1502F608	15K 1/6W 5 TA26
		R633	0RD2701F608	2.7K 1/6W 5 TA26
		R634	0RD1202F608	12K 1/6W 5 TA26
		R635	0RD8201F608	8.2K 1/6W 5 TA26
		R636	0RD3300F608	330 1/6W 5 TA26
		R637	0RD3300F608	330 1/6W 5 TA26
		R638	0RD3902F608	39K 1/6W 5 TA26
		R639	0RD4701F608	4.7K 1/6W 5 TA26
		R640	0RD1501F608	1.5K 1/6W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R641	0RD1001F608	1.0K 1/6W 5 TA26
		R642	0RD8200F608	820 1/6W 5 TA26
		R643	0RD4702F608	47K 1/6W 5 TA26
		R644	0RD4702F608	47K 1/6W 5 TA26
		R645	0RD1501F608	1.5K 1/6W 5 TA26
		R646	0RD1002F608	10K 1/6W 5 TA26
		R647	0RD1501F608	1.5K 1/6W 5 TA26
		R648	0RD2201F608	2.2K 1/6W 5 TA26
		R649	0RD1001F608	1.0K 1/6W 5 TA26
		R650	0RD6801F608	6.8K 1/6W 5 TA26
		R651	0RD3302F608	33K 1/6W 5 TA26
		R652	0RD1002F608	10K 1/6W 5 TA26
		R653	0RD6800F608	680 1/6W 5 TA26
		R654	0RD1801F608	1.8K 1/6W 5 TA26
		R655	0RD6801F608	6.8K 1/6W 5 TA26
		R658	0RD2701F608	2.7K 1/6W 5 TA26
		R701	0RD4700F608	470 1/6W 5 TA26
		R702	0RD0182F608	18 1/6W 5 TA26
		R703	0RD1002F608	10K 1/6W 5 TA26
		R704	0RD2700F608	270 1/6W 5 TA26
		R705	0RD8200F608	820 1/6W 5 TA26
		R706	0RD1001F608	1.0K 1/6W 5 TA26
		R707	0RD5601F608	5.6K 1/6W 5 TA26
		R708	0RD2202F608	22K 1/6W 5 TA26
		R709	0RD1802F608	18K 1/6W 5 TA26
		R710	0RD1003F608	100K 1/6W 5 TA26
		R711	0RD8202F608	82K 1/6W 5 TA26
		R712	0RD4700F608	470 1/6W 5 TA26
		R713	0RD2202F608	22K 1/6W 5 TA26
		R714	0RD1003F608	100K 1/6W 5 TA26
		R715	0RD5601F608	5.6K 1/6W 5 TA26
		R716	0RD5601F608	5.6K 1/6W 5 TA26
		R717	0RD5601F608	5.6K 1/6W 5 TA26
		R718	0RD1802F608	18K 1/6W 5 TA26
		R719	0RD2202F608	22K 1/6W 5 TA26
		R720	0RD1502F608	15K 1/6W 5 TA26
		R722	0RD1502F608	15K 1/6W 5 TA26
		R723	0RD1801F608	1.8K 1/6W 5 TA26
		R724	0RD3900F608	390 1/6W 5 TA26
		R801	0RD0102F608	10 1/6W 5 TA26
		R802	0RD2701F608	2.7K 1/6W 5 TA26
		R807	0RD1202F608	12K 1/6W 5 TA26
		R808	0RD1000F608	100 1/6W 5 TA26
		R809	0RD1000F608	100 1/6W 5 TA26
		R810	0RD3304F608	3.3M 1/6W 5 TA26
		R814	0RD3304F608	3.3M 1/6W 5 TA26
		R815	0RD5601F608	5.6K 1/6W 5 TA26
		R816	0RD1501F608	1.5K 1/6W 5 TA26
		R817	0RD4700F608	470 1/6W 5 TA26
		R818	0RD3900F608	390 1/6W 5 TA26
		R820	0RD2202F608	22K 1/6W 5 TA26
		R821	0RD3302F608	33K 1/6W 5 TA26
		R823	0RD1003F608	100K 1/6W 5 TA26
		R824	0RD1803F608	180K 1/6W 5 TA26
		R825	0RD1802F608	18K 1/6W 5 TA26
		R826	0RD8201F608	8.2K 1/6W 5 TA26
		R827	0RD4701F608	4.7K 1/6W 5 TA26
		R830	0RD2202F608	22K 1/6W 5 TA26
		R831	0RD4701F608	4.7K 1/6W 5 TA26
		R832	0RD4701F608	4.7K 1/6W 5 TA26
		R835	0RD6800F608	680 1/6W 5 TA26
		R839	0RD6800F608	680 1/6W 5 TA26

S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R841	0RD1000F608	100 1/6W 5 TA26
		R842	0RD1000F608	100 1/6W 5 TA26
		R845	0RD4701F608	4.7K 1/6W 5 TA26
		R846	0RD6801F608	6.8K 1/6W 5 TA26
		R847	0RD0472F608	47 1/6W 5 TA26
		R848	0RD4702F608	47K 1/6W 5 TA26
		R849	0RD0102F608	10 1/6W 5 TA26
		R850	0RD0102F608	10 1/6W 5 TA26
		R861	0RD1003F608	100K 1/6W 5 TA26
		R862	0RD1003F608	100K 1/6W 5 TA26
		R870	0RD4701F608	4.7K 1/6W 5 TA26
		R871	0RD6801F608	6.8K 1/6W 5 TA26
		R872	0RD0472F608	47 1/6W 5 TA26
		R873	0RD4702F608	47K 1/6W 5 TA26
		R874	0RD0102F608	10 1/6W 5 TA26
		R875	0RD0102F608	10 1/6W 5 TA26
		R876	0RD1003F608	100K 1/6W 5 TA26
		R877	0RD1003F608	100K 1/6W 5 TA26
		R878	0RD6800F608	680 1/6W 5 TA26
		R879	0RD1503F608	150K 1/6W 5 TA26
		R880	0RD1503F608	150K 1/6W 5 TA26
		R882	0RD1203F608	120K 1/6W 5 TA26
		R883	0RD3903F608	390K 1/6W 5 TA26
		R884	0RD1003F608	100K 1/6W 5 TA26
		R885	0RD6801F608	6.8K 1/6W 5 TA26
		R886	0RD1001F608	1.0K 1/6W 5 TA26
		R887	0RD3903F608	390K 1/6W 5 TA26
		R888	0RD8202F608	82K 1/6W 5 TA26
		R889	0RD1001F608	1.0K 1/6W 5 TA26
		R890	0RD7500F608	750 1/6W 5 TA26
		R891	0RD3903F608	390K 1/6W 5 TA26
		R892	0RD8202F608	82K 1/6W 5 TA26
		R893	0RD1001F608	1.0K 1/6W 5 TA26
		R894	0RD7500F608	750 1/6W 5 TA26
		R896	0RD2702F608	27K 1/6W 5 TA26
		R897	0RD1201F608	1.2K 1/6W 5 TA26
		R899	0RD1202F608	12K 1/6W 5 TA26
		R901	0RD1801F608	1.8K 1/6W 5 TA26
		R902	0RD1801F608	1.8K 1/6W 5 TA26
		R903	0RD1801F608	1.8K 1/6W 5 TA26
		R904	0RD1801F608	1.8K 1/6W 5 TA26
		R905	0RD2201F608	2.2K 1/6W 5 TA26
		R906	0RD2201F608	2.2K 1/6W 5 TA26
		R907	0RD1001F608	1.0K 1/6W 5 TA26
		R908	0RD1001F608	1.0K 1/6W 5 TA26
		R909	0RD6800F608	680 1/6W 5 TA26
		R910	0RD4700F608	470 1/6W 5 TA26
		R911	0RD1201F608	1.2K 1/6W 5 TA26
		R912	0RD1000F608	100 1/6W 5 TA26
		R913	0RD1000F608	100 1/6W 5 TA26
		R914	0RD0752F608	75 1/6W 5 TA26
		R915	0RD0752F608	75 1/6W 5 TA26
		R916	0RD0752F608	75 1/6W 5 TA26
		R917	0RD0752F608	75 1/6W 5 TA26
		R918	0RD0752F608	75 1/6W 5 TA26
		R919	0RD1003F608	100K 1/6W 5 TA26
		R920	0RD0752F608	75 1/6W 5 TA26
		R921	0RD1500F608	150 1/6W 5 TA26
		R922	0RD5602F608	56K 1/6W 5 TA26
		R923	0RD5602F608	56K 1/6W 5 TA26
		R924	0RD1802F608	18K 1/6W 5 TA26
		R925	0RD1802F608	18K 1/6W 5 TA26

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S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		R926	0RD5602F608	56K 1/6W 5 TA26
		R927	0RD5602F608	56K 1/6W 5 TA26
		R928	0RD1001F608	1.0K 1/6W 5 TA26
		R929	0RD1203F608	120K 1/6W 5 TA26
		R930	0RD1003F608	100K 1/6W 5 TA26
		R931	0RD1802F608	18K 1/6W 5 TA26
		R932	0RD1802F608	18K 1/6W 5 TA26
		R933	0RD1003F608	100K 1/6W 5 TA26
		R934	0RD1203F608	120K 1/6W 5 TA26
		R935	0RD1001F608	1.0K 1/6W 5 TA26
		R936	0RD1001F608	1.0K 1/6W 5 TA26
		R937	0RD1203F608	120K 1/6W 5 TA26
		R938	0RD1203F608	120K 1/6W 5 TA26
		R939	0RD1203F608	120K 1/6W 5 TA26
		R940	0RD1203F608	120K 1/6W 5 TA26
		R941	0RD1001F608	1.0K 1/6W 5 TA26
		R942	0RD1001F608	1.0K 1/6W 5 TA26
		R943	0RD1001F608	1.0K 1/6W 5 TA26
		R944	0RD1202F608	12K 1/6W 5 TA26
		R945	0RD1202F608	12K 1/6W 5 TA26
		R946	0RD1202F608	12K 1/6W 5 TA26
		R947	0RD1202F608	12K 1/6W 5 TA26
		R948	0RD1002F608	10K 1/6W 5 TA26
		R949	0RD1002F608	10K 1/6W 5 TA26
		R950	0RD5600F608	560 1/6W 5 TA26
		R951	0RD5600F608	560 1/6W 5 TA26
		R952	0RD1002F608	10K 1/6W 5 TA26
		R953	0RD1002F608	10K 1/6W 5 TA26
		R954	0RD5600F608	560 1/6W 5 TA26
		R955	0RD5600F608	560 1/6W 5 TA26
		R956	0RD2702F608	27K 1/6W 5 TA26
		R957	0RD3902F608	39K 1/6W 5 TA26
		R958	0RD1001F608	1.0K 1/6W 5 TA26
		R959	0RD1001F608	1.0K 1/6W 5 TA26
		R960	0RD0752F608	75 1/6W 5 TA26
		R961	0RD1001F608	1.0K 1/6W 5 TA26
		R962	0RD1001F608	1.0K 1/6W 5 TA26
		R963	0RD5603F608	560K 1/6W 5 TA26
		R964	0RD3302F608	33K 1/6W 5 TA26
		R965	0RD1000F608	100 1/6W 5 TA26
		R966	0RD1502F608	15K 1/6W 5 TA26
		R967	0RD1502F608	15K 1/6W 5 TA26
		RP01	614-007A	2.7/2W CEMENT SMPS V
		RP02	0RD4702F608	47K 1/6W 5 TA26
		RP03	0RD4702F608	47K 1/6W 5 TA26
		RP04	0RD5101F608	5.1K 1/6W 5 TA26
		RP05	0RD0752F608	75 1/6W 5 TA26
		RP06	0RD1202F608	12K 1/6W 5 TA26
		RP07	0RD2201F608	2.2K 1/6W 5 TA26
		RP08	0RD1800F608	180 1/6W 5 TA26
		RP09	0RD1800F608	180 1/6W 5 TA26
		RP10	0RN3301F408	3.3K 1/6W 1 TA26
		RP11	0RN2701F408	2.70K 1/6W 1% TA26
		RP12	0RD3300F608	330 1/6W 5 TA26
		RP13	0RD2201F608	2.2K 1/6W 5 TA26
		RP14	0RD1001F608	1.0K 1/6W 5 TA26
		RP15	0RD1001F608	1.0K 1/6W 5 TA26
		RP16	0RD2702F608	27K 1/6W 5 TA26
		RP17	0RD1202F608	12K 1/6W 5 TA26
		RP18	0RD4701F608	4.7K 1/6W 5 TA26
		RP19	0RD2201F608	2.2K 1/6W 5 TA26
		RP20	0RD1002F608	10K 1/6W 5 TA26

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S	AL	LOCA.NO	PART NO(GS)	SPECIFICATION
		RP21	0RD0222F608	22 1/6W 5 TA26
		RP22	0RS0470K619	0.47OHM 2 W 5% TR
		RP23	0RD6801F608	6.8K 1/6W 5 TA26
		RP24	0RS3302K619	33K 2W 5% TR
		RP25	0RD2200F608	220 1/6W 5 TA26
		RP26	0RD2202F608	22K 1/6W 5 TA26
		RP27	0RD1003F608	100K 1/6W 5 TA26
		RP29	0RS3302K619	33K 2W 5% TR
		RP30	0RD5600F608	560 1/6W 5 TA26
		RP32	0RD1201F608	1.2K 1/6W 5 TA26
		RP33	0RD1201F608	1.2K 1/6W 5 TA26
		RP34	0RD5601F608	5.6K 1/6W 5 TA26
		RP36	0RD1002F608	10K 1/6W 5 TA26
		RP37	0RD2700F608	270 1/6W 5 TA26
		RP38	0RD2700F608	270 1/6W 5 TA26
		RP39	0RD2700F608	270 1/6W 5 TA26
		RP40	0RD2700F608	270 1/6W 5 TA26
		RP41	0RD2701F608	2.7K 1/6W 5 TA26
		RP42	0RD2701F608	2.7K 1/6W 5 TA26
		RP99	0RD0222F608	22 1/6W 5 TA26